

# NOTICE

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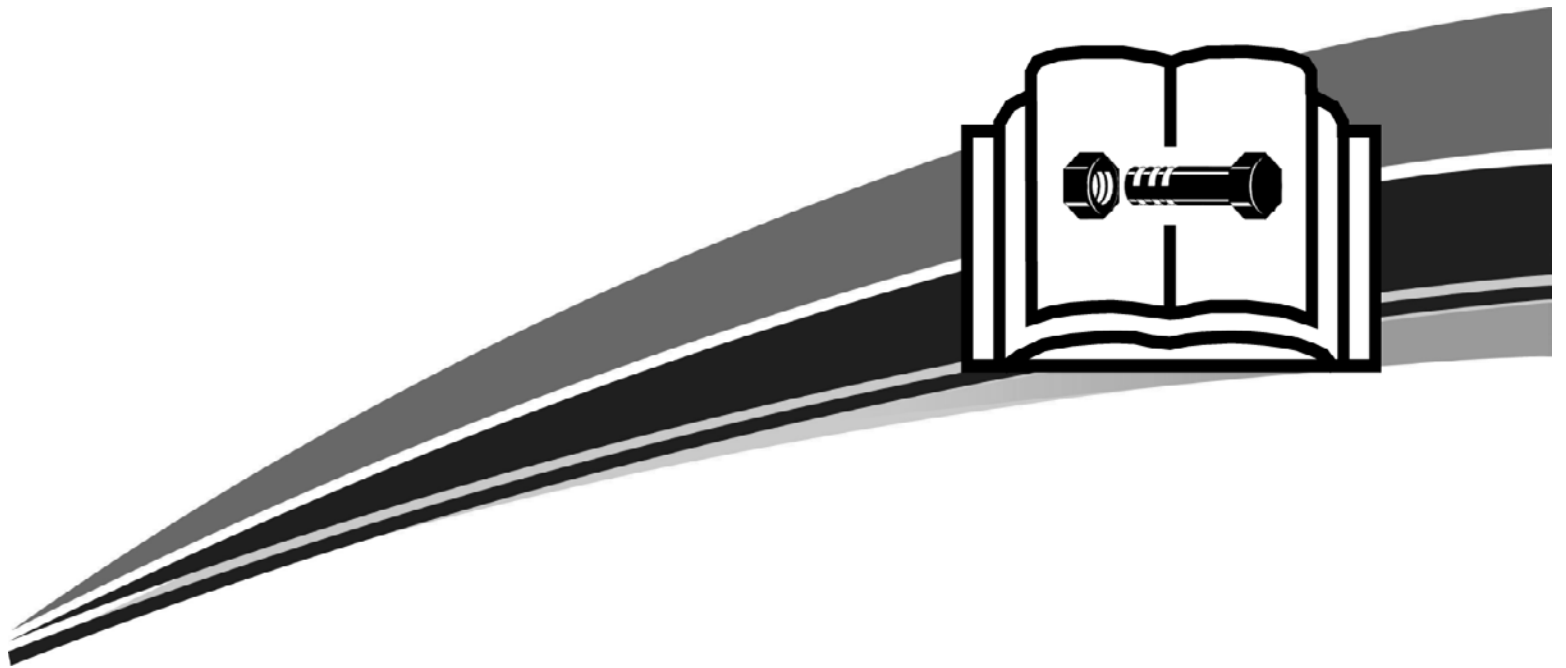
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# D20x22 Series II Navigator® Horizontal Directional Drill

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## *Parts Manual*



P1.22  
Serial No. 316 -  
Order No. 105400ZKO

**Vermeer®**

## HOW TO USE THE MANUAL

This manual contains illustrations and parts lists of components and assemblies which make up the machine. Each page consists of the name of the assembly or component, a figure number, reference numbers, part numbers, part names, and the quantities of the parts used.

Assembly or component name helps identify the illustration and parts list for each figure. This name also helps locate the general area of the machine where the assembly or component can be located.

Figure numbers are used to identify each assembly or component and to group these assemblies or components into major categories.

Reference numbers shown in a column refer to the numbered parts in the illustration. This ties the part in the illustration to the part number and description in the parts list.

An asterisk indicates information about the item has changed since the previous release of the parts manual. A note in the Remarks column often explains the change.

Part numbers are used to identify individual parts or part assemblies.

Part descriptions provide the name of the part, plus additional information such as dimensional specifications and what parts are grouped together to form part assemblies, which helps you identify the part(s).

Quantities listed for each figure are only for that assembly or component and not the total used per machine.

This parts manual is not intended to be a complete guide for machine service or repairs. Contact your Vermeer dealer for any of your service or technical requirements.

## ORDERING PARTS

Parts for repair or replacement are available through our network of authorized dealers located throughout the world.

Use only authorized Vermeer parts for repair or replacement. Always give the serial number and

model number of the machine for which parts are being ordered. When ordering parts for component(s), which are not manufactured by Vermeer Corporation, also give the serial number of that component(s). Order all parts by part number, part name, and quantity needed.

## UPDATING AND REORDERING MANUALS

The parts lists, illustrations, and specifications in this manual are based on the latest information available at time of publication. Your machine may have product improvements and options not yet contained in this manual.

Vermeer Corporation reserves the right to make changes at any time without notice or obligation to you.

Your dealer will receive notice of these changes and can assist you with accurate parts identification when ordering.

A copy of this manual is supplied with each machine. Additional copies are available through your dealer. When ordering additional manuals, use the reorder number listed on the front cover and the quantity needed.

**NOTICE TO OWNER** – You are requested to notify Vermeer Corporation when you have purchased a **used** Vermeer machine. Notify the Customer Data Department by telephone: 800-829-0051 or 641-628-3141; email: [customerdata@vermeer.com](mailto:customerdata@vermeer.com); internet: [www.vermeer.com](http://www.vermeer.com) or [www.vermeerag.com](http://www.vermeerag.com); or, letter: Customer Data Dept., Vermeer Corporation, PO Box 200, Pella IA 50219 USA. Upon request, an owner of a used Vermeer machine will receive one free set of Operator's, Maintenance and Parts manuals.

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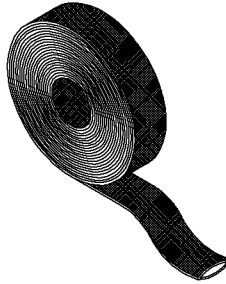
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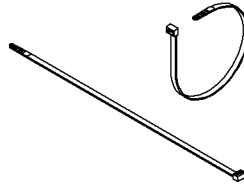
Hydraulic Supplies Fig 1-1

CORDURA SLEEVES

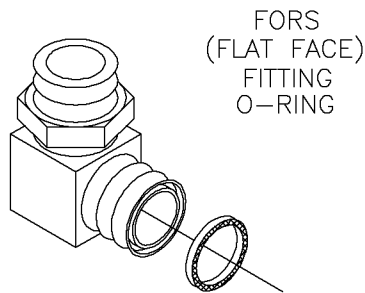
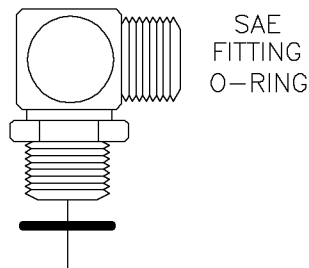


NOTE: SPECIFY LENGTH WHEN ORDERING

TIE STRAPS



O-RINGS



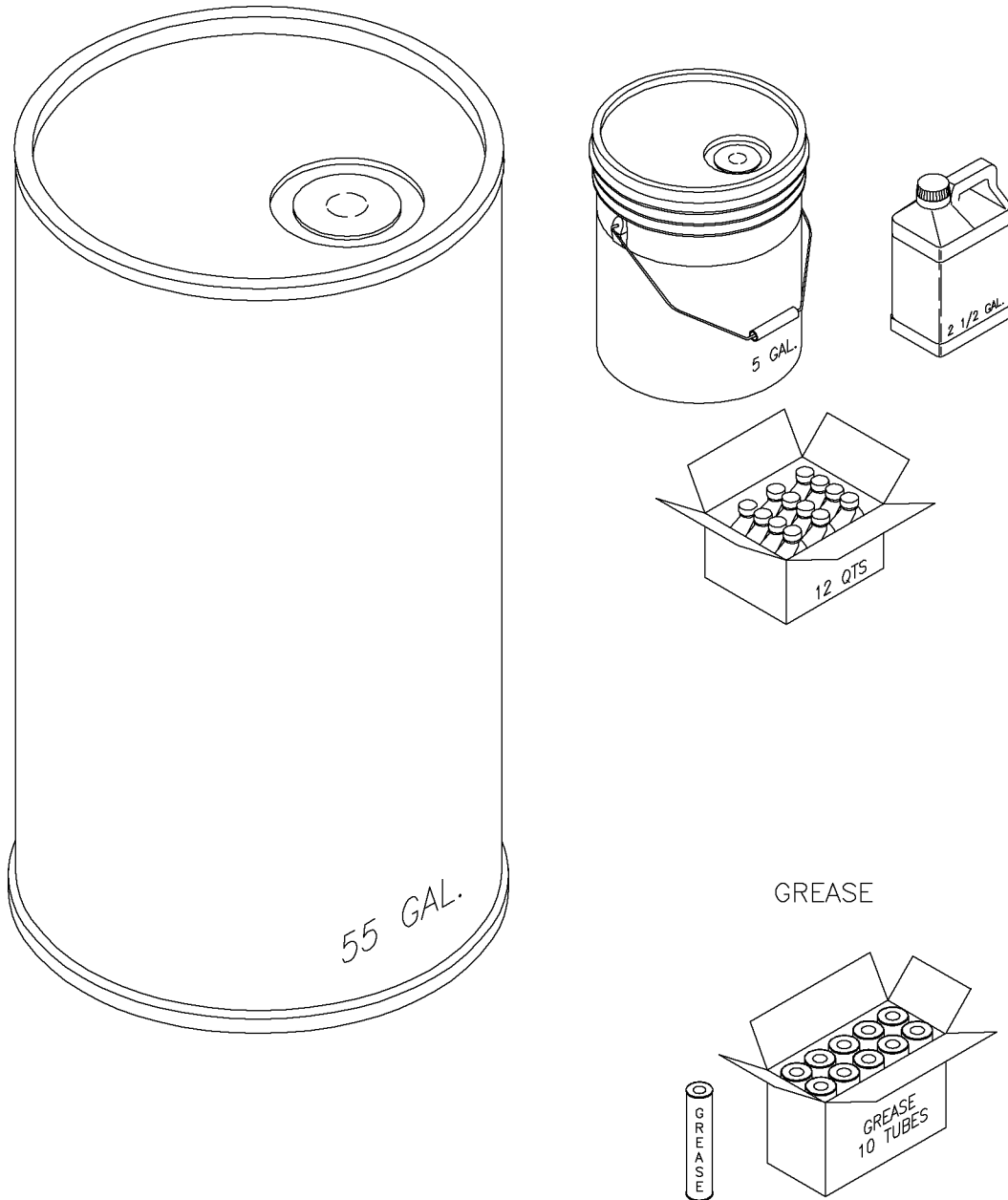
NOTE: O-RINGS LISTED ARE 90 DUROMETER

## Hydraulic Supplies Fig 1-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
			<b>CORDURA SLEEVES</b>		
		83726001	INSIDE DIAMETER .71		
		235824001	INSIDE DIAMETER .90		
		66094001	INSIDE DIAMETER 1.22		
		67264001	INSIDE DIAMETER 1.42		
		69129001	INSIDE DIAMETER 1.59		
		53840001	INSIDE DIAMETER 1.81		
		53841001	INSIDE DIAMETER 2.37		
		235824001	INSIDE DIAMETER 2.66		
			NOTE: SPECIFY LENGTH WHEN ORDERING		
			<b>TIE STRAPS</b>		
		78657001	4 IN. LENGTH		
		59634001	6 IN. LENGTH		
		59634001	8 IN. LENGTH		
		58151001	15 IN. LENGTH		
			<b>O-RINGS</b>		
			<b>SAE FITTING REPLACEMENT O-RING</b>		
		78185027	4M SAE FITTING SIZE		
		53649081	5M SAE FITTING SIZE		
		59088057	6M SAE FITTING SIZE		
		59088053	8M SAE FITTING SIZE		
		792029	10M SAE FITTING SIZE		
		3152013	12M SAE FITTING SIZE		
		3155015	14M SAE FITTING SIZE		
		81580001	16M SAE FITTING SIZE		
		93316001	20M SAE FITTING SIZE		
			<b>O-RINGS</b>		
			<b>FORS FITTING REPLACEMENT O-RING</b>		
		93843001	ORING-AS-011-C90 FOR#4ORS FIT		
		93844001	ORING-AS-012-C90 FOR #6ORS FIT		
		93845001	ORING-AS-014-C90 FOR#8ORS FIT.		
		93846001	O-RING-AS-016-C90 FOR#10ORS FIT		
		93847001	O-RING-AS-018-C90 FOR#12ORS FIT		
		93848001	ORING-AS-021-C90 FOR#16ORS FIT		
		93849001	O-RING-AS-025-C90 FOR#20ORS FIT		
		93850001	O-RING-AS-029-C90 FOR#24ORS FIT		
			NOTE: O-RINGS LISTED ARE 90 DUROMETER		

Lubricants Fig 1-2

MOTOR OIL, HYD FLUID, HYD OIL,  
TRANSMISSION FLUID, ETC.

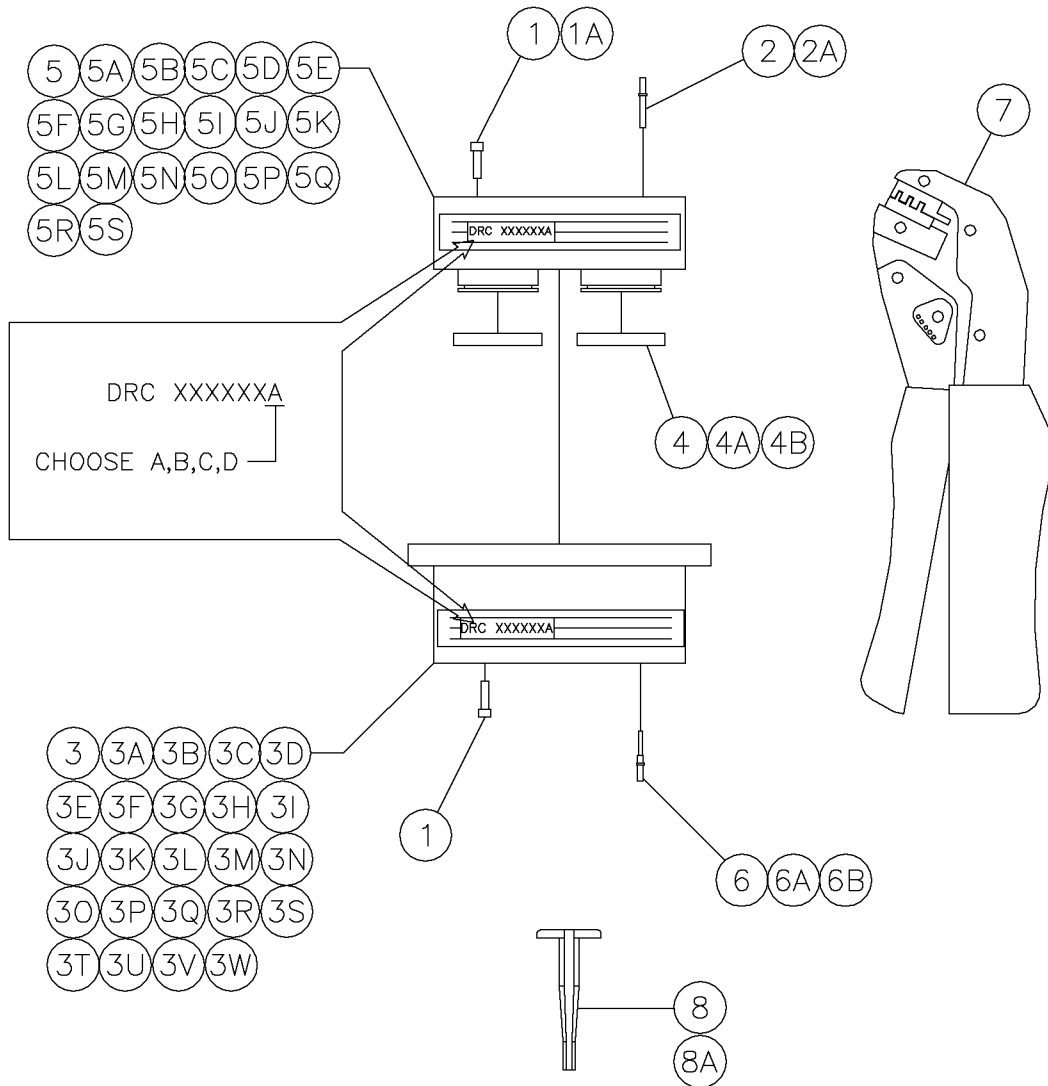


## Lubricants Fig 1-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		99661002	15W40 MOTOR OIL 2 1/2 GAL (CASE 2)		
		99661003	15W40 MOTOR OIL 5 GALLON		
		99661005	15W40 MOTOR OIL 55 GALLON		
		99661008	15W40 MOTOR OIL(CASE 12 QUARTS)		
		104155005	XTRA 30W MOTOR OIL 55 GALLON		
		142939002	10W30 MOTOR OIL -2 X 2.5 GAL		
		142939003	XTRA 10W30 MOTOR OIL -5 GALLON		
		142939008	10W30 MOTOR OIL (12 QTS)		
		247337008	50W OIL-NONDETERGENT (CASE 12 QUARTS)		
		99662002	VMF HYD FLUID 2 1/2 GAL		
		99662003	VMF HYD FLUID 5 GALLON		
		99662005	VMF HYD FLUID 55 GALLON		
		101518002	HY-POWER 68 2 1/2 GAL (CASE 2)		
		101518003	HY-POWER 68 HYD OIL 5 GALLON		
		101518005	HY-POWER 68 HYD OIL 55 GAL.		
		101519002	HY-POWER 100 2 1/2 GAL (CASE/2)		
		101519003	HY-POWER 100 HYD OIL 5 GALLON		
		101519005	HY-POWER 100 HYD OIL 55 GAL		
		621584002	HY-POWER 46 HYD OIL 2 1/2 GAL (CASE 2)		
		621584003	HY-POWER 46 HYD OIL 5 GALLON		
		621584005	HY-POWER 46 HYD OIL 55 GAL.		
		125653002	VERMEER ATF 2 1/2 GAL. (CASE 2)		
		125653003	VERMEER ATF 5 GALLON		
		127732003	HYD. OIL-BIODEGRADABLE (5 GAL)		
		144569982	MOBIL EAL-224H 55 GAL		
		99663002	80W90 TRANS FLUID(CS 2 OF 2 1/2 GA)		
		99663003	80W90 TRANS OIL 5 GALLON		
		99663005	80W90 TRANS OIL 55 GAL		
		216825008	75W90 SYNTHETIC OIL QT. (CASE 12)		
		238858008	OIL-SYNTHETIC - IS0220 (CASE)		
		101562003	ULTRA LC GREASE-CASE/10 14OZ.		

DRC Series Connectors Fig 1-3

DRC SERIES

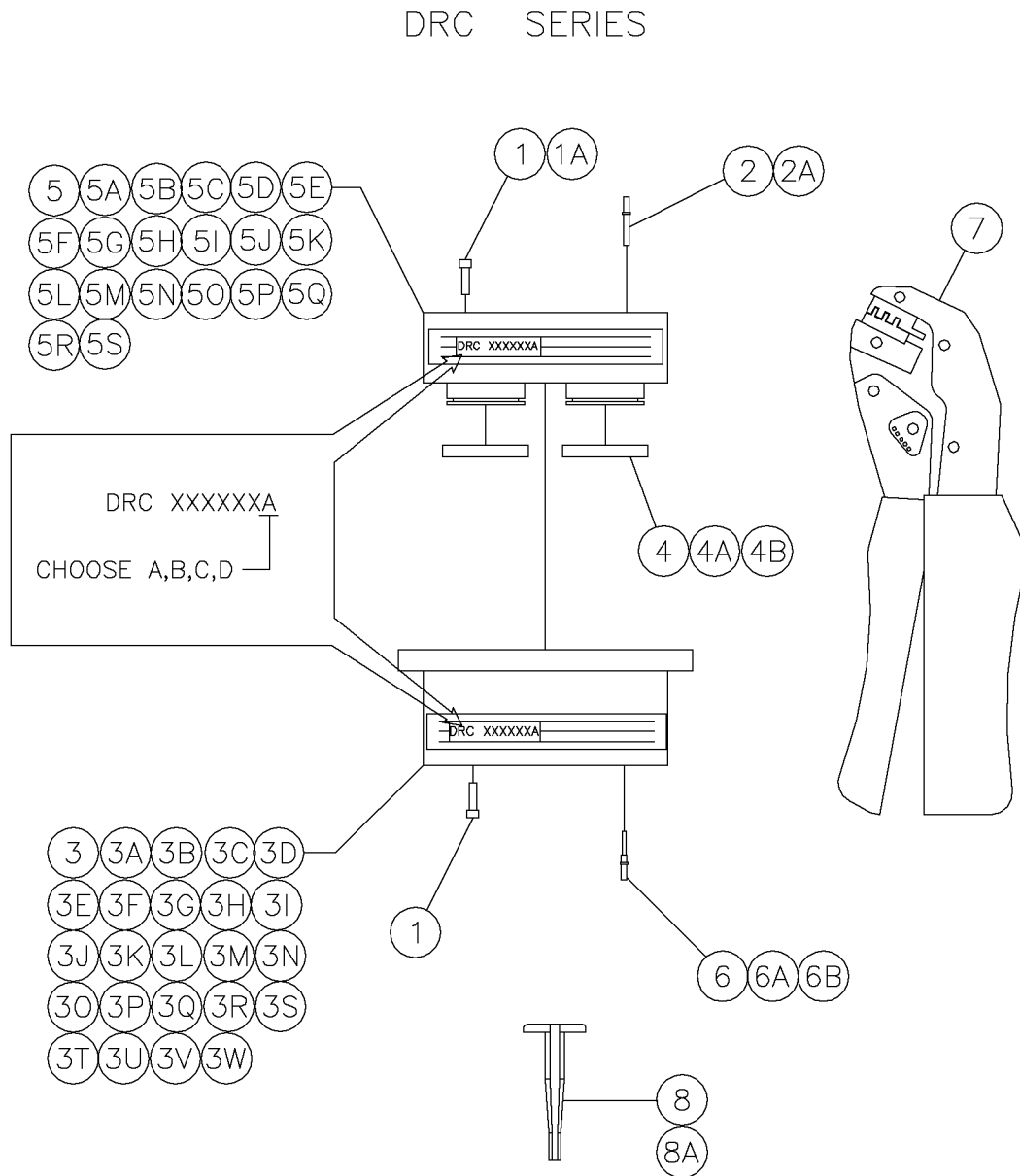




## DRC Series Connectors Fig 1-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		276906001	PLUG - SEALING (20)		
1A		94201001	PLUG - SEALING (12-16)		
2		91354001	SOCKET - 16/18 GA.		
2A		276916001	SOCKET - 20 GA.		
2B		276894001	RECEPTACLE - 24 PIN INLINE (A)		
3		276894001	RECEPTACLE - 24 PIN INLINE (A)		
3A		276907001	RECEPTACLE - 24 PIN INLINE (B)		
3B		276917001	RECEPTACLE - 24 PIN INLINE (C)		
3C		276918001	RECEPTACLE - 24 PIN INLINE (D)		
3D		276895001	RECEPTACLE - 24 IN FLNG MNT (A)		
3E		276908001	RECEPTACLE - 24 PIN FLNG MNT (B)		
3F		276919001	RECEPTACLE - 24 PIN FLNG MNT (C)		
3G		276920001	RECEPTACLE - 24 PIN FLNG MNT (D)		
3H		276896001	RECEPTACLE - 40 PIN INLINE (A)		
3I		276909001	RECEPTACLE - 40 PIN INLINE (B)		
3J		276921001	RECEPTACLE - 40 PIN INLINE (C)		
3K		276922001	RECEPTACLE - 40 PIN INLINE (D)		
3L		276897001	RECEPTACLE - 40 PIN FLNG MNT (A)		
3M		276910001	RECEPTACLE - 40 PIN FLNG MNT (B)		
3N		276923001	RECEPTACLE - 40 PIN FLNG MNT (C)		
3O		276924001	RECEPTACLE - 40 PIN FLNG MNT (D)		
3P		276898001	RECEPTACLE - 70 PIN INLINE (A)		
3R		276925001	RECEPTACLE - 70 PIN INLINE (C)		
3S		276926001	RECEPTACLE - 70 PIN INLINE (D)		
3T		276899001	RECEPTACLE - 70 PIN FLNG MNT (A)		
3U		276912001	RECEPTACLE - 70 PIN FLNG MNT (B)		
3V		276927001	RECEPTACLE - 70 PIN FLNG MNT (C)		
3W		276928001	RECEPTACLE - 70 PIN FLNG MNT (D)		
4		276900001	GASKET - 24 PIN INTERFACE		
4A		276901001	GASKET - 40 PIN INTERFACE		
4B		276902001	GASKET - 70 PIN INTERFACE		
			Continued On Next Pages		

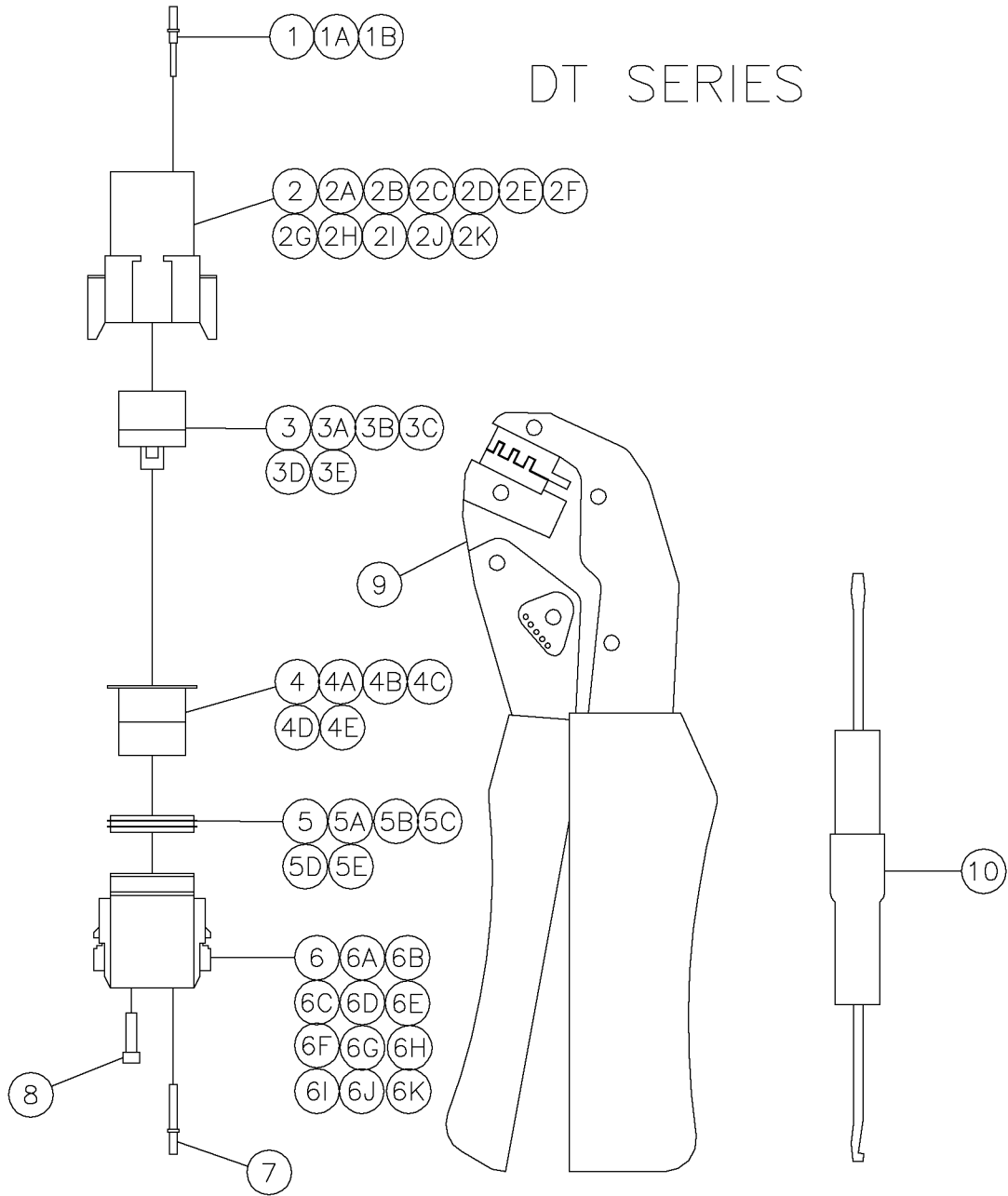
DRC Series Connectors Fig 1-3



## DRC Series Connectors Fig 1-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
5		276931001	PLUG - 24 PIN (SIZE 20 CONTACTS) (A)		
5A		276932001	PLUG - 24 PIN (SIZE 20 CONTACTS)		
5B		276933001	PLUG - 24 PIN (SIZE 20 CONTACTS) (C)		
5C		276934001	PLUG - 24 PIN (SIZE 20 CONTACTS) (D)		
5D		276939001	PLUG - 40 PIN (SIZE 20 CONTACTS) (A)		
5E		276940001	PLUG - 40 PIN (SIZE 20 CONTACTS) (B)		
5F		276941001	PLUG - 40 PIN (SIZE 20 CONTACTS) (C)		
5G		276942001	PLUG - 40 PIN (SIZE 20 CONTACTS) (D)		
5H		276903001	PLUG - 24 PIN (A)		
5I		276913001	PLUG - 24 PIN (B)		
5J		276929001	PLUG - 24 PIN (C)		
5K		276930001	PLUG - 24 PIN (D)		
5L		276904001	PLUG - 40 PIN (A)		
5M		276914001	PLUG - 40 PIN (B)		
5N		276935001	PLUG - 40 PIN (C)		
5O		276936001	PLUG - 40 PIN (D)		
5P		276905001	PLUG - 70 PIN (A)		
5Q		276915001	PLUG - 70 PIN (B)		
5R		276937001	PLUG - 70 PIN (C)		
5S		276938001	PLUG - 70 PIN (D)		
6		276866001	PIN - 14/16 GA.		
6A		87696001	PIN-16/18 GA.		
6B		276951001	PIN - (20 GA.)		
7		286553001	TOOL - DEUTSCH CRIMPING (FIELD)		
8		276892001	TOOL - 16/18 GA. EXTRACTOR (BLUE)		
8A		276893001	TOOL - 20/24 GA. EXTRACTOR (RED)		

DT Series Connectors Fig 1-4

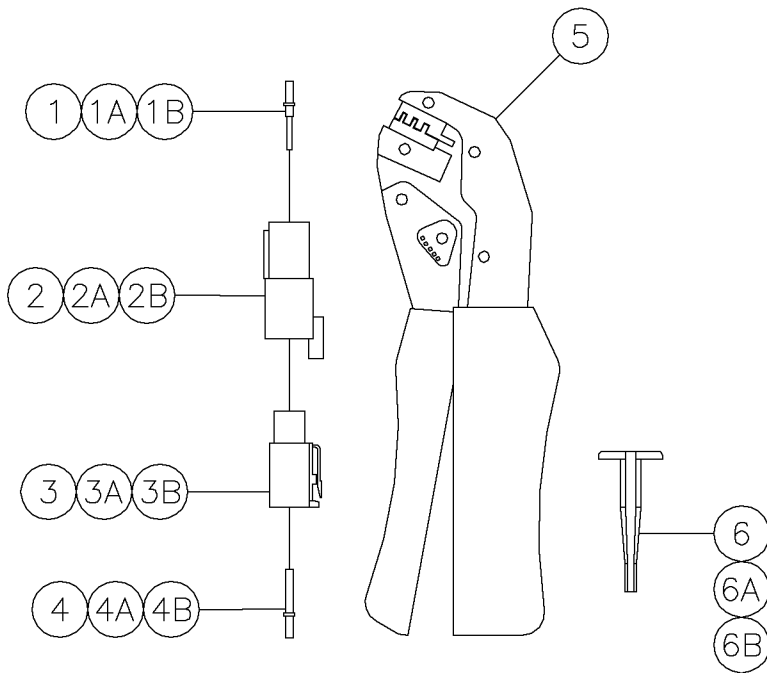


## DT Series Connectors Fig 1-4

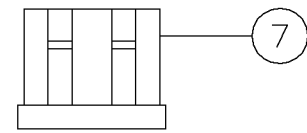
REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		276866001	PIN - 14/16 GA.		
1A		87696001	PIN-16/18 GA.		
1B		276951001	PIN - (20 GA.)		
2		276867001	RECEPTACLE - 2 PIN		
2A		276868001	RECEPTACLE - 3 PIN		
2B		276869001	RECEPTACLE - 4 PIN		
2C		276890001	RECEPTACLE - 6 PIN		
2D		276943001	RECEPTACLE - 8 PIN (A)		
2E		276944001	RECEPTACLE - 8 PIN (B)		
2F		276945001	RECEPTACLE - 8 PIN (C)		
2G		276946001	RECEPTACLE - 8 PIN (D)		
2H		276947001	RECEPTACLE - 12 PIN (A)		
2I		276948001	RECEPTACLE - 12 PIN (B)		
2J		276949001	RECEPTACLE - 12 PIN (C)		
2K		276950001	RECEPTACLE - 12 PIN (D)		
3		276870001	WEDGE - 2 PIN RECEPTACLE		
3A		276871001	WEDGE - 3 PIN RECEPTACLE		
3B		276872001	WEDGE - 4 PIN RECEPTACLE		
3C		276873001	WEDGE - 6 PIN RECEPTACLE		
3D		94200001	WEDGE - 8 PIN RECEPTACLE		
3E		103213001	WEDGE - 12 PIN RECEPTACLE		
4		276874001	WEDGE - 2 PIN PLUG		
4A		276875001	WEDGE - 3 PIN PLUG		
4B		276876001	WEDGE - 4 PIN PLUG		
4C		276877001	WEDGE - 6 PIN PLUG		
4D		98106001	WEDGE - 8 PIN PLUG		
4E		103214001	WEDGE - 12 PIN PLUG		
5		276878001	GASKET - INTERFACE 2 PIN		
5A		276879001	GASKET - INTERFACE 3 PIN		
5B		276880001	GASKET - INTERFACE 4 PIN		
5C		276881001	GASKET - INTERFACE 6 PIN		
5D		276882001	GASKET - INTERFACE 8 PIN		
5E		276883001	GASKET - INTERFACE 12 PIN		
6		276884001	PLUG - 2 PIN		
6A		276885001	PLUG - 3 PIN		
6B		276886001	PLUG - 4 PIN		
6C		276887001	PLUG - 6 PIN		
6D		98107001	PLUG - 8 PIN (A)		
6E		276985001	PLUG - 8 PIN (B)		
6F		276986001	PLUG - 8 PIN (C)		
6G		276987001	PLUG - 8 PIN (D)		
6H		103211001	PLUG - 12 PIN (A)		
6I		276988001	PLUG - 12 PIN (B)		
6J		276989001	PLUG - 12 PIN (C)		
6K		276990001	PLUG - 12 PIN (D)		
7		91354001	SOCKET - 16/18 GA.		
8		94201001	PLUG - SEALING (12-16)		
9		286553001	TOOL - DEUTSCH CRIMPING (FIELD)		
10		286553003	TOOL - DEUTSCH (FIELD)		

DTHD Series/HDFB Modules Fig 1-5

DTHD SERIES



HDFB MODULES

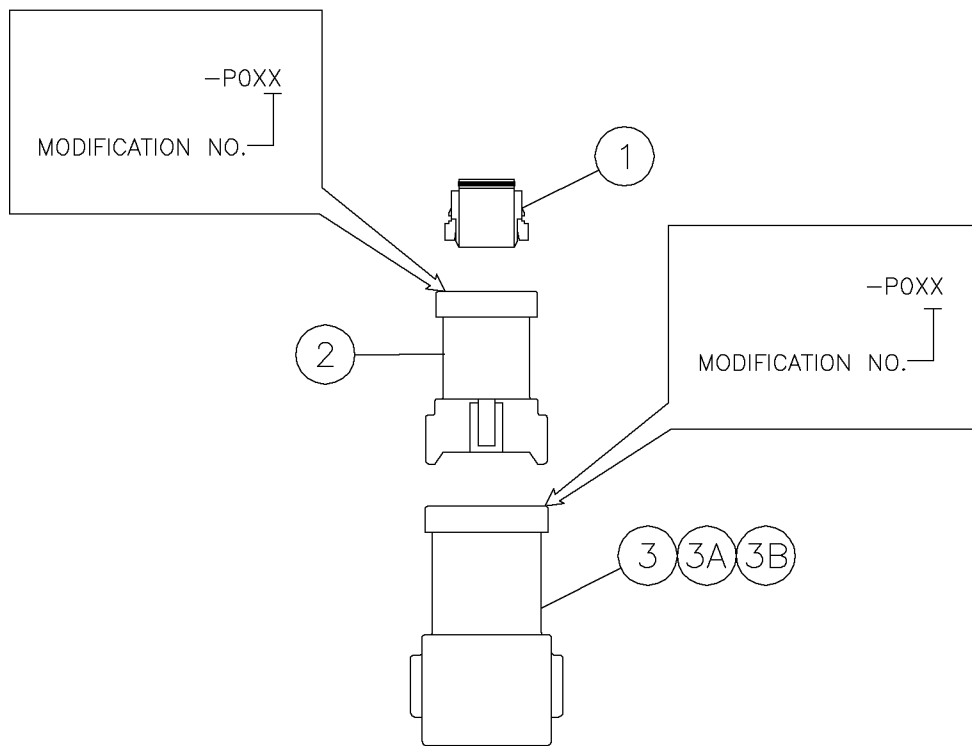


## DTHD Series/HDFB Modules Fig 1-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		231988001	PIN-12 GA		
1A		276953001	PIN - 8/10 GA.		
1B		276954001	PIN - 6 GA.		
2		279423001	RECEPTACLE - SIZE 4 CONTACT		
2A		279424001	RECEPTACLE - SIZE 8 CONTACT		
2B		279425001	RECEPTACLE - SIZE 12 CONTACT		
3		279426001	PLUG - SIZE 4 CONTACT		
3A		279427001	PLUG - SIZE 8 CONTACT		
3B		279428001	PLUG - SIZE 12 CONTACT		
4		276982001	SOCKET - 12/14 GA. DEUTSCH		
4A		276984001	SOCKET - 8/12 GA.		
4B		276952001	SOCKET - 6 GA.		
5		603961001	PLIERS-DEUTSCH CRIMPING		
6		276981001	PLUG - 19 PIN (SHELL SIZE 24)		
6A		276889001	TOOL - 8/10 GA. EXTRACTOR (GREEN)		
6B		276888001	TOOL - 6 GA. EXTRACTOR (WHITE)		
7		279430001	MODULE - FEEDBACK (10 PIN)		
			Not All Items Listed Are Used On This Machine		

DT Series Diodes/Buss Block Fig 1-6

DT SERIES DIODE/BUSS BLOCKS

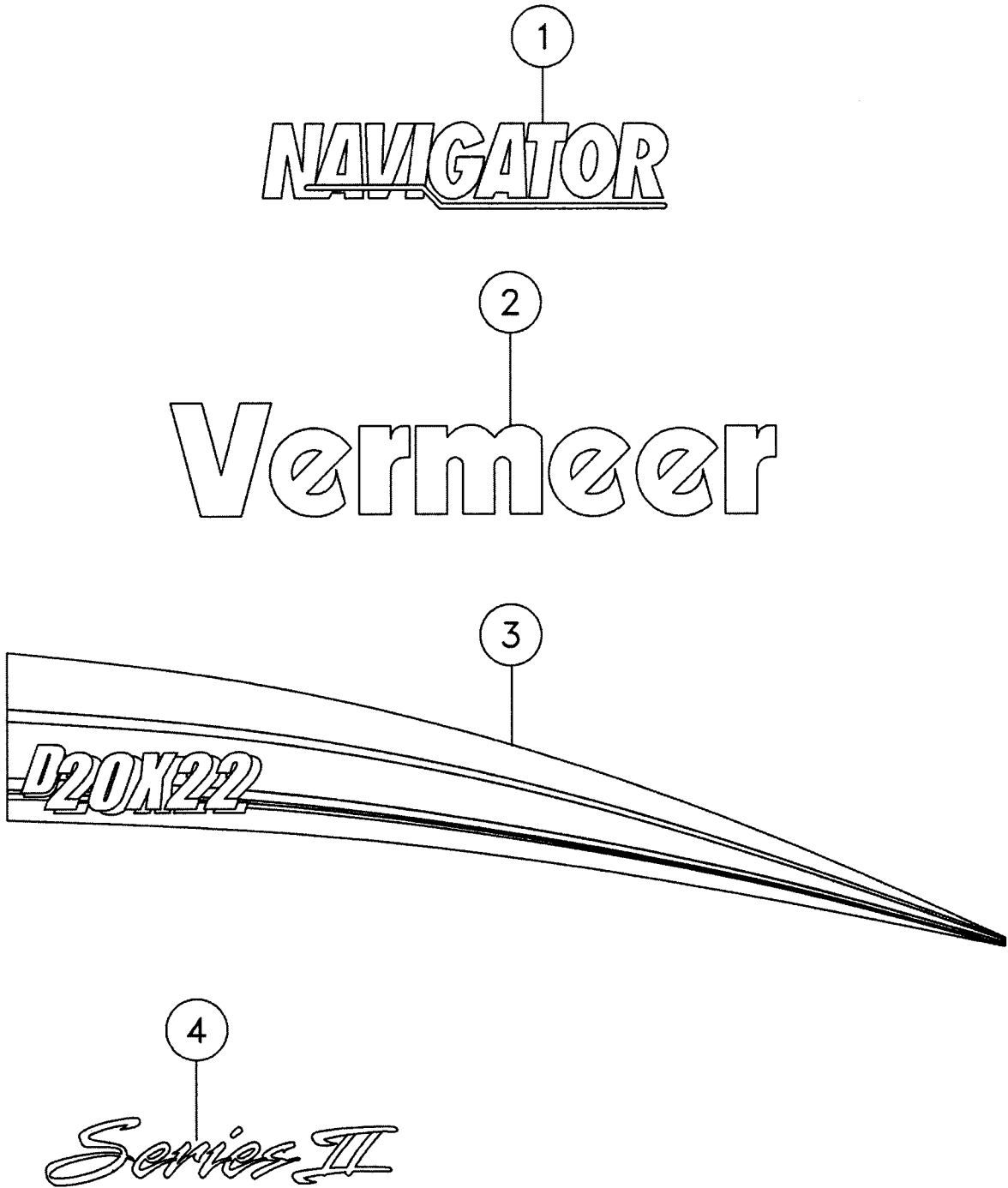




## DT Series Diodes/Buss Block Fig 1-6

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		282531001	MODULE - DEUTSCH DT06-6S 3AMP DIODE	1	
2		700000096	BUSS - 1 - 8PIN - B	1	
3		700000102	BUSS - 1 - 12PIN - B - NICKEL	1	
3A		700000104	BUSS - 2 - 12PIN - B - 6/6	1	
3B		700000106	BUSS - 4 - 12PIN - B - 3/3/3/3	1	

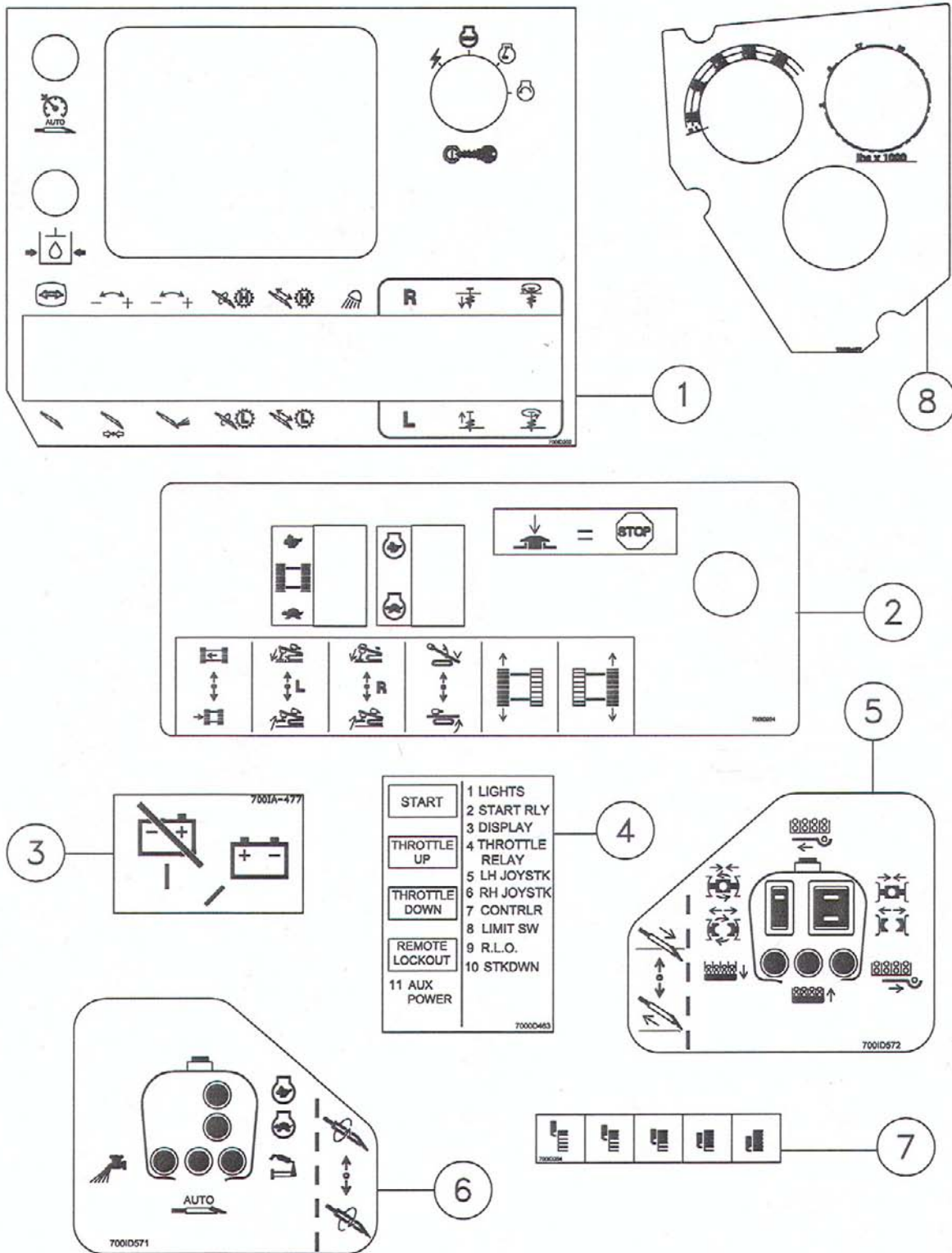
Cosmetic Fig 2-1



## Cosmetic Fig 2-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		70000614	DECAL-MODEL NAVIGATOR (BIG)	1	Domestic/International
2		2326595	DECAL VERMEER- 4 1/2 X 24	1	Domestic/International
3		7000D581	DECAL - D20X22II STRIPE	1	Domestic/International
4		7000C463	DECAL - SERIES II MEDIUM	1	Domestic/International

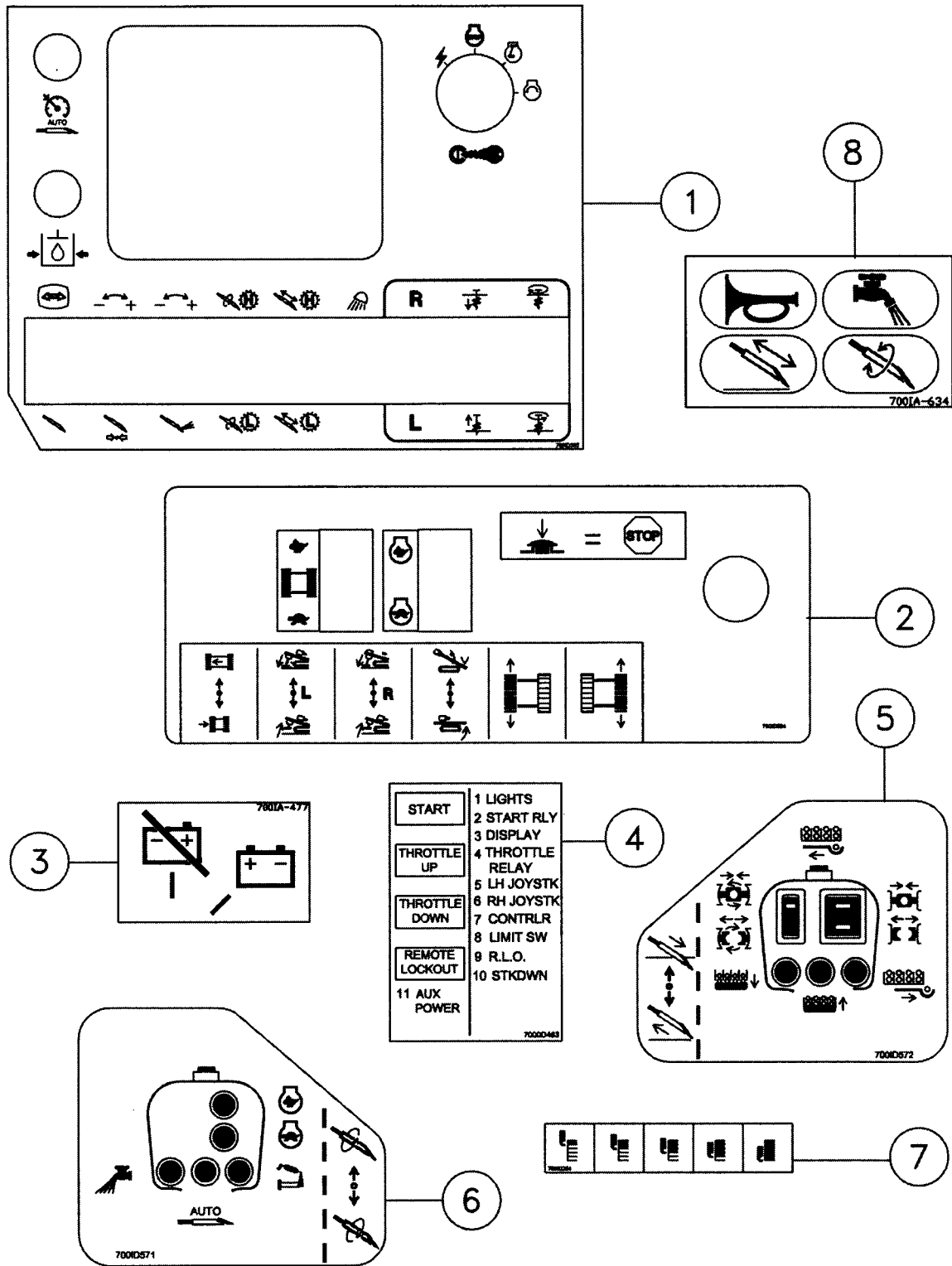
Control Fig 2-2r01



## Control Fig 2-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		700ID202	DECAL - CONTROL DASH PANEL - D20X22II	1	Domestic/International
2		700ID204	DECAL - CONTROL REAR	1	Domestic/International
3		700IA477	DECAL_BATTERY SWITCH (UG)	1	Domestic/International
4		700D463	DECAL-RELAY/FUSE PANEL	1	Domestic/International
5		700ID572	DECAL - RIGHT JOYSTICK CONTROL	1	Domestic/International
6		700ID571	DECAL - LEFT JOYSTICK CONTROL	1	Domestic/International
7		700ID254	DECAL - ROW SELECTOR	1	Domestic/International
8	*	700ID677	DECAL - D16X20 II GAUGE CLUSTER	1	Domestic/International

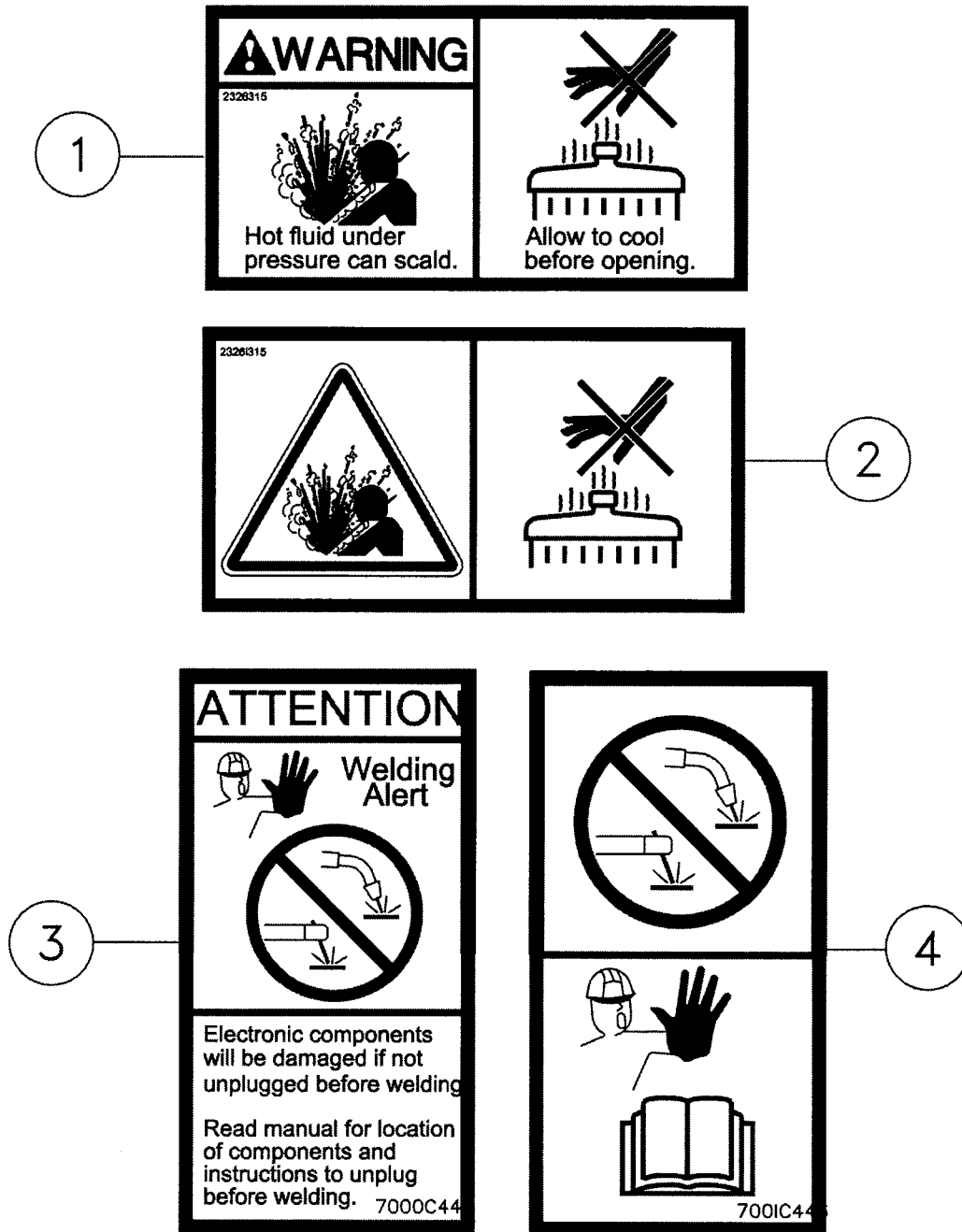
Control Fig 2-2



## Control Fig 2-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		700ID202	DECAL - CONTROL DASH PANEL - D20X22II	1	Domestic/International
2		700ID204	DECAL - CONTROL REAR	1	Domestic/International
3		700IA477	DECAL_BATTERY SWITCH (UG)	1	Domestic/International
4		7000D463	DECAL-RELAY/FUSE PANEL	1	Domestic/International
5		700ID572	DECAL - RIGHT JOYSTICK CONTROL	1	Domestic/International
6		700ID571	DECAL - LEFT JOYSTICK CONTROL	1	Domestic/International
7		700ID254	DECAL - ROW SELECTOR	1	Domestic/International
8		700IA634	DECAL-GAUGES	1	Domestic/International

Safety Fig 2-3

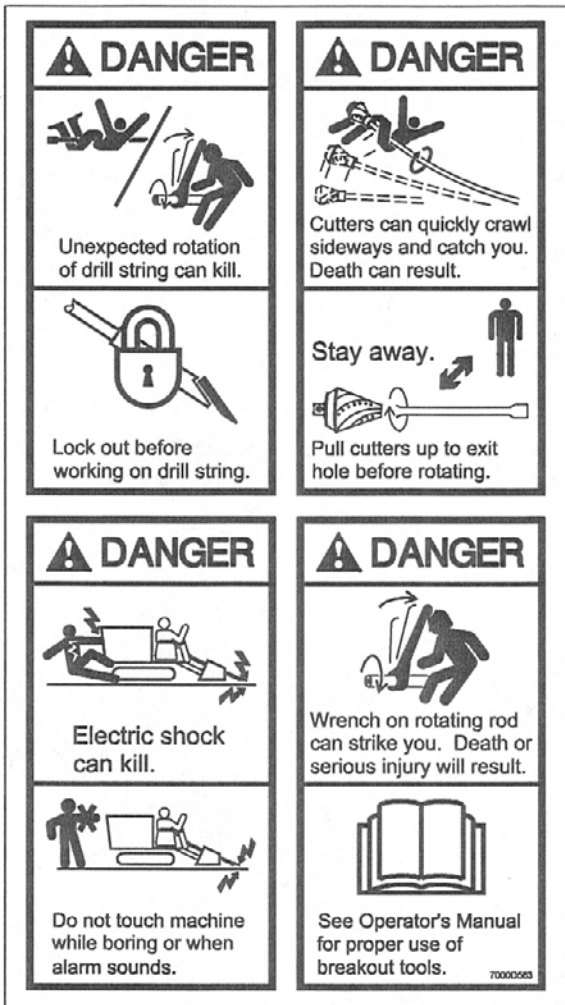




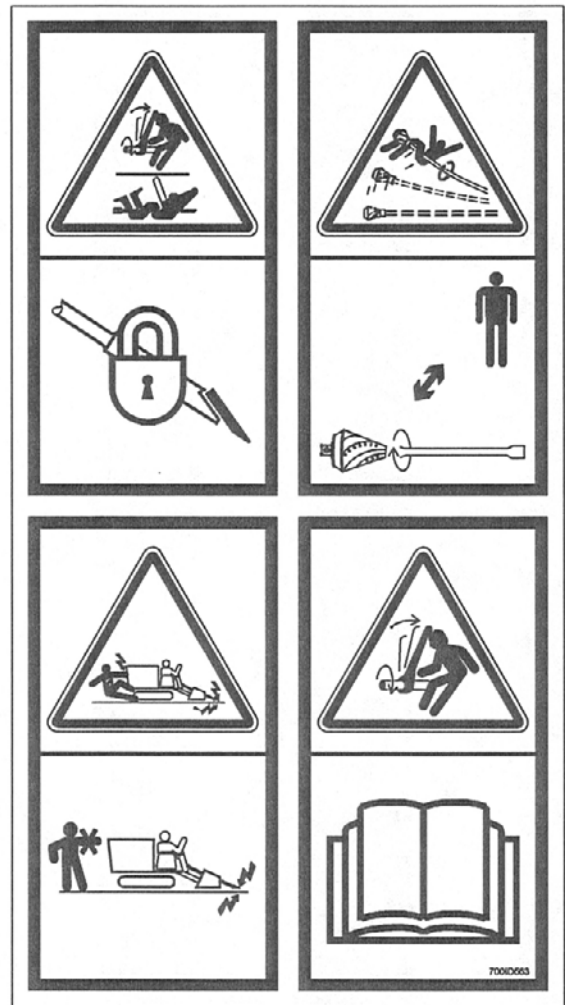
## Safety Fig 2-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		2326315	DECAL-WARNING	1	Domestic
2		2326I315	DECAL-WARNING	1	International
3		7000C446	DECAL - NO WELD	2	Domestic
4		700IC446	DECAL - NO WELD	2	International

Safety Fig 2-4r01



1



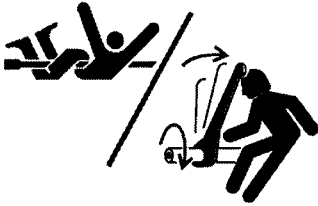
2

## Safety Fig 2-4r01


REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Update In Illustration.
1		7000D563	DECAL - DANGER 4 PANEL	2	Domestic
2	*	7001D563	DECAL - DANGER 4 PANEL	2	International

Safety Fig 2-4

**⚠ DANGER**

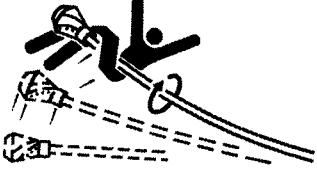


Unexpected rotation of drill string can kill.



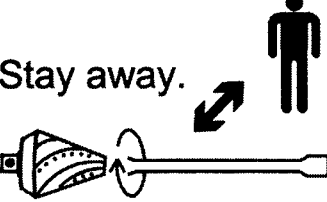
Lock out before working on drill string.

**⚠ DANGER**



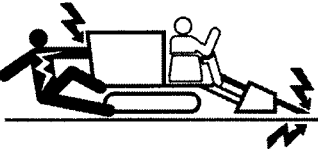
Cutters can quickly crawl sideways and catch you. Death can result.

Stay away.




Pull cutters up to exit hole before rotating.

**⚠ DANGER**




Electric shock can kill.




Do not touch machine while boring or when alarm sounds.

**⚠ DANGER**



Wrench on rotating rod can strike you. Death or serious injury will result.



See Operator's Manual for proper use of breakout tools.

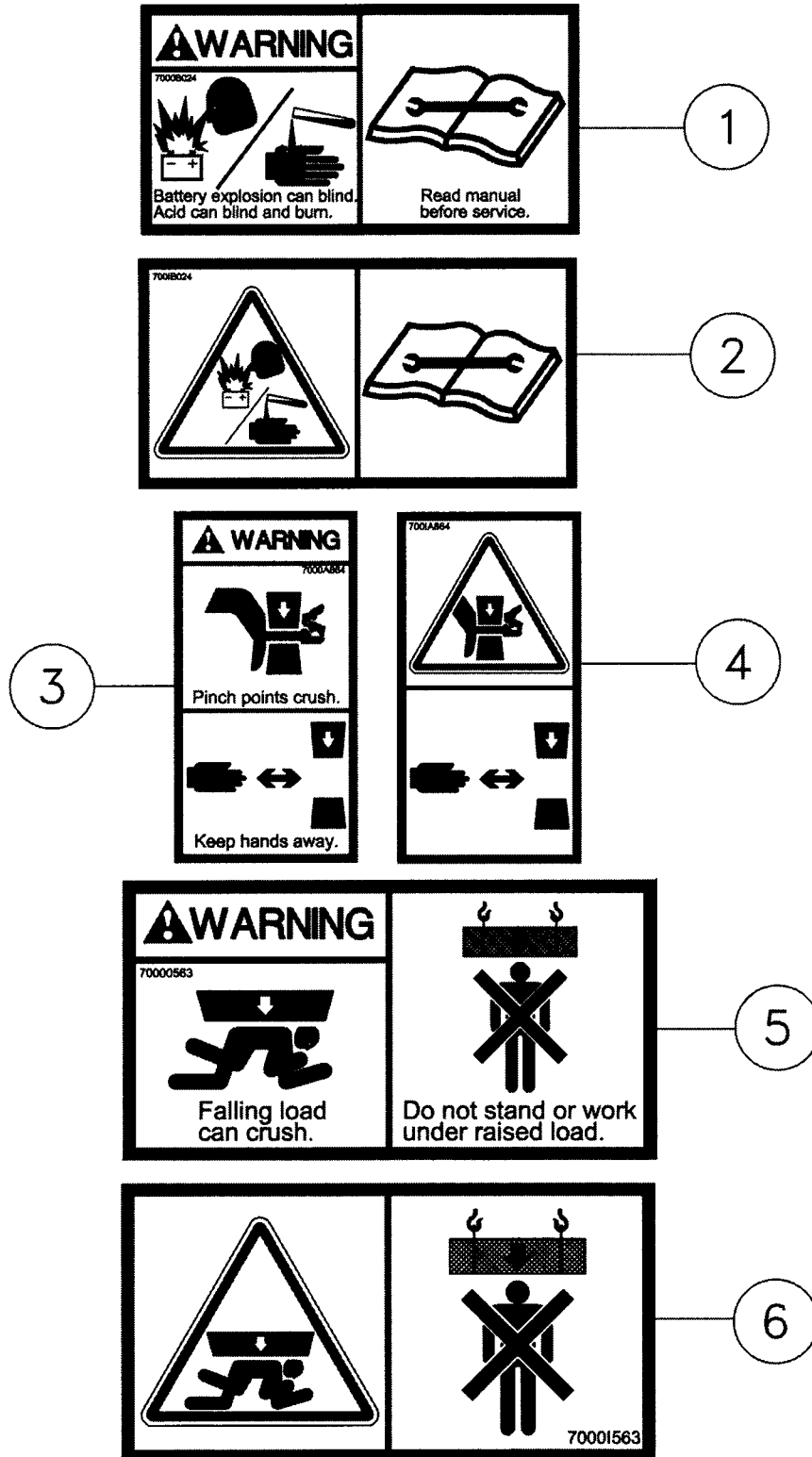
7000D563

1

Safety Fig 2-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		7000D563	DECAL - DANGER 4 PANEL	2	Domestic

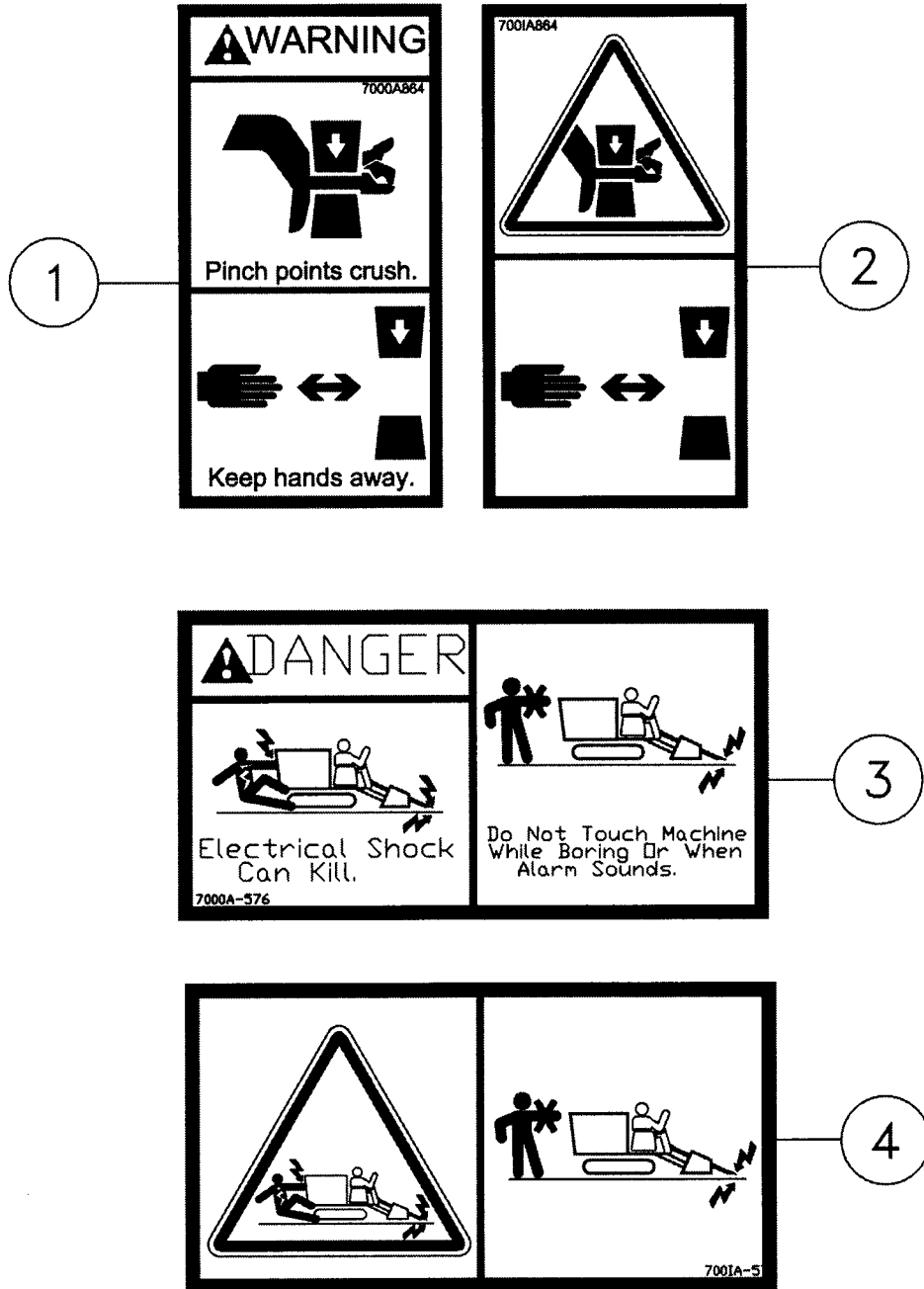
Safety Fig 2-5



## Safety Fig 2-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		7000B024	DECAL - WARNING	1	Domestic
2		7001B024	DECAL - WARNING	1	International
3		7000A864	DECAL-WARNING DOMESTIC	1	Domestic
4		7001A864	DECAL-WARNING INTERNATIONAL	1	International
5		70000563	DECAL-WARNING (UND)	2	Domestic
6		70001563	DECAL-WARNING (UND)	2	International

Safety Fig 2-6

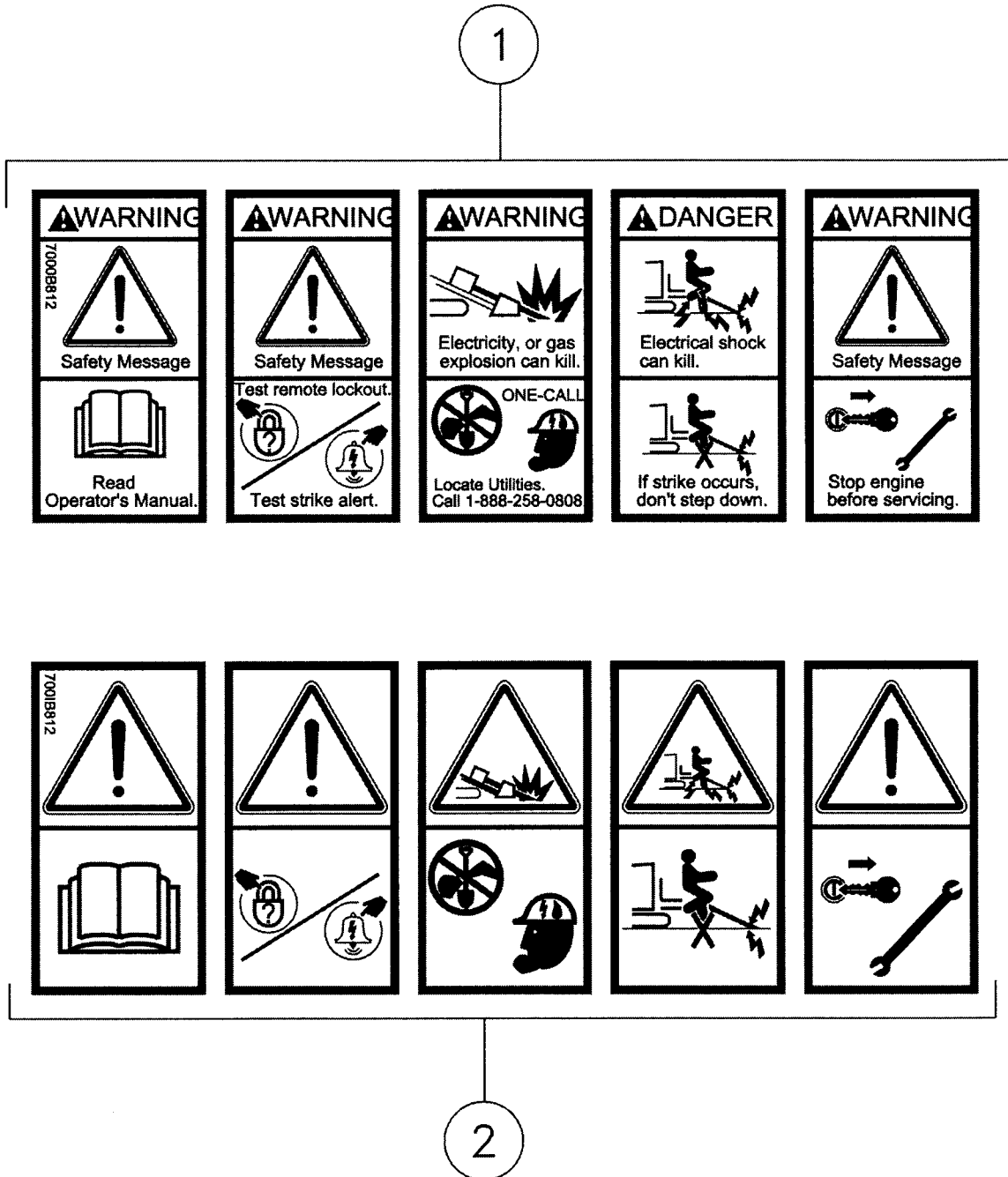




## Safety Fig 2-6

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		7000A864	DECAL-WARNING DOMESTIC	1	Domestic
2		700IA864	DECAL-WARNING INTERNATIONAL	1	International
3		7000A576	DECAL-DANGER	3	Domestic
4		700IA576	DECAL-DANGER	2	International

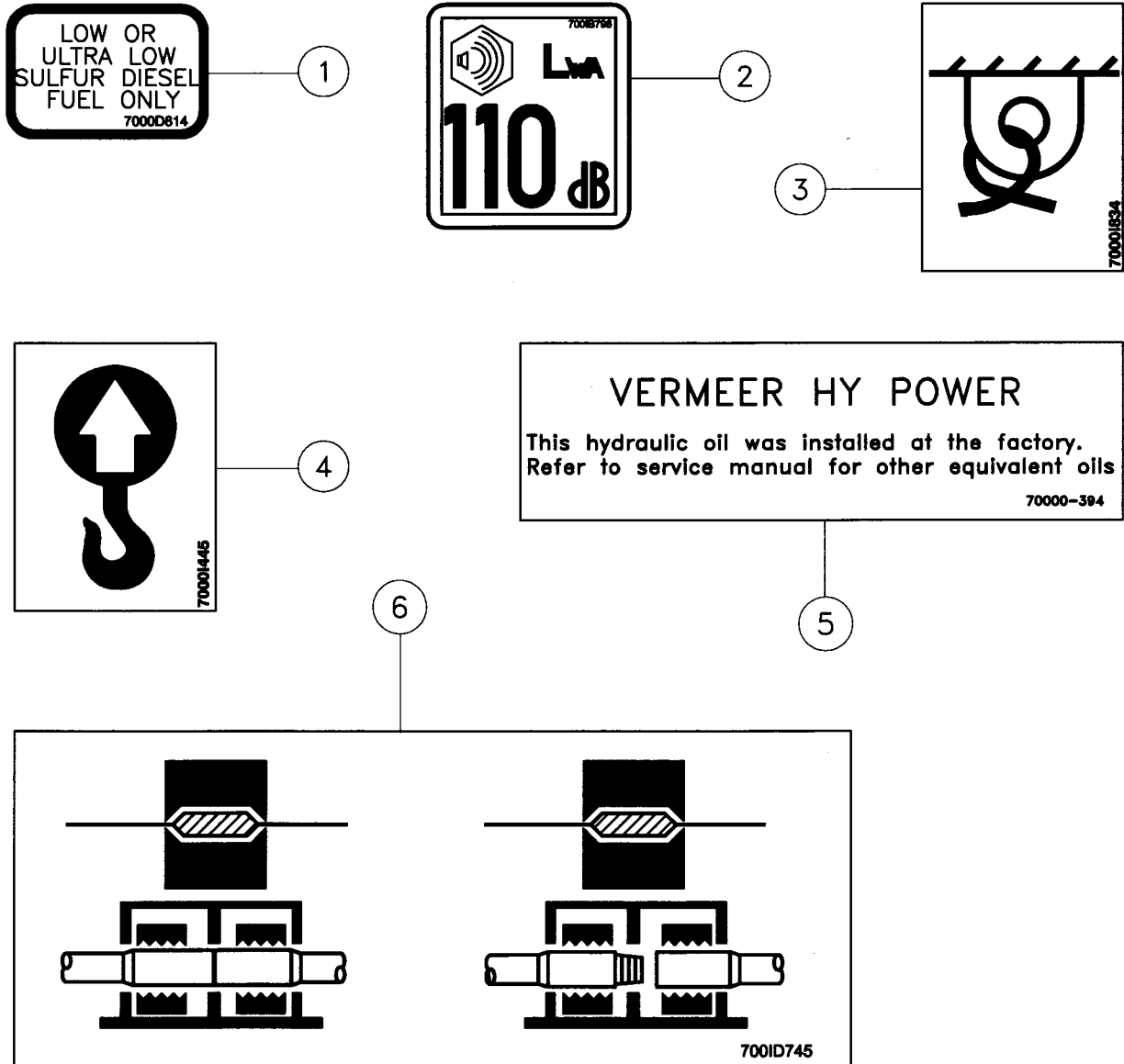
Safety Fig 2-7



## Safety Fig 2-7

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		7000B812	DECAL - WARNING	1	Domestic
2		700IB812	DECAL - WARNING	1	International

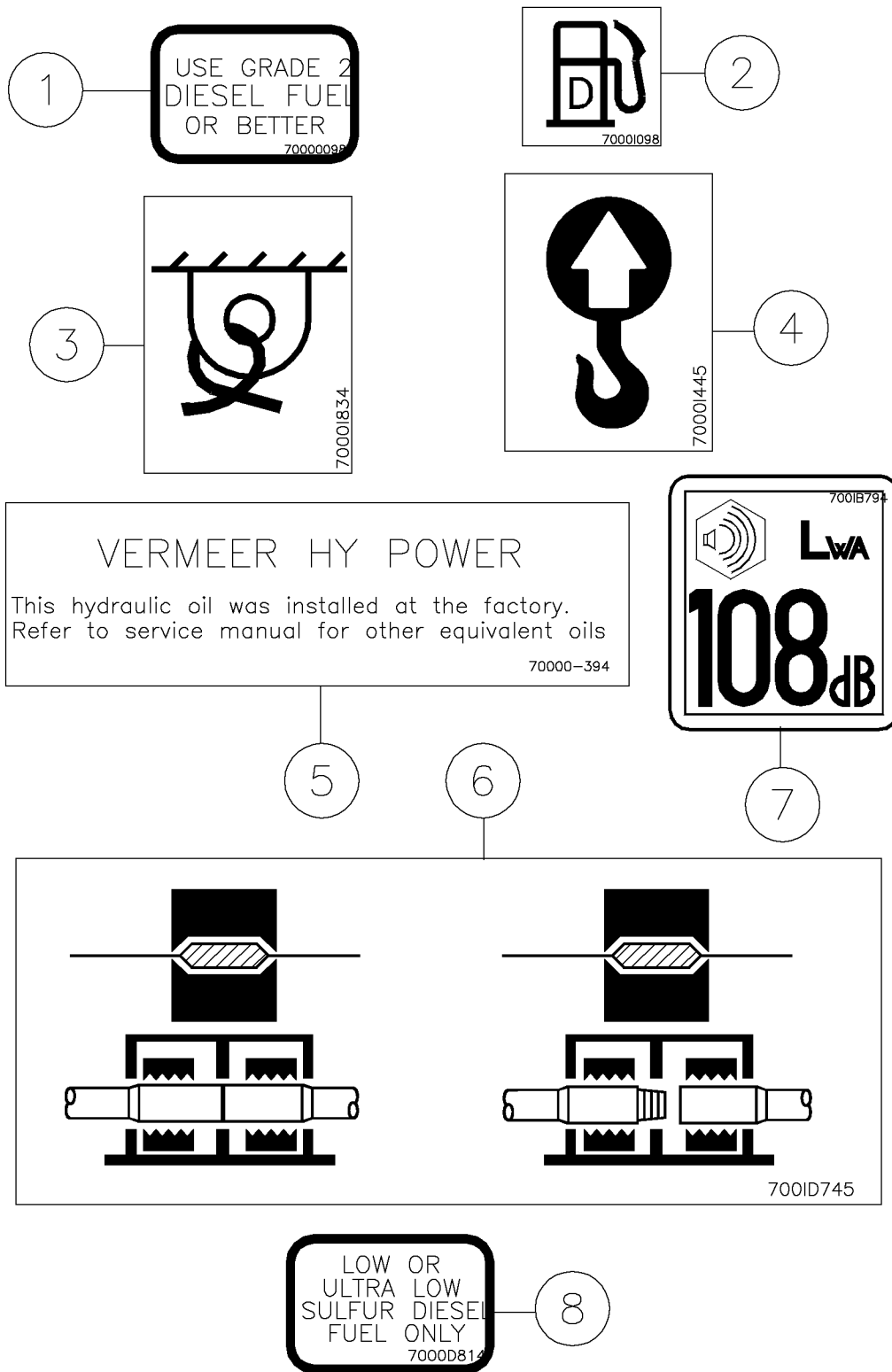
Miscellaneous Fig 2-8r02



## Miscellaneous Fig 2-8r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Change Decals.
1		7000D814	DECAL - DIESEL FUEL SPECIFICATION	1	Domestic/International
2	*	700IB796	DECAL- SOUND POWER LEVEL (110)	1	Domestic/International
3		7000I834	DECAL - TIE DOWN POINT	4	Domestic/International
4		7000I445	DECAL-LIFT POINT	4	Domestic/International
5		70000394	DECAL-VERMEER HY POWER	1	Domestic/International
6		700ID745	DECAL - ROD POSITIONER	1	Domestic/International

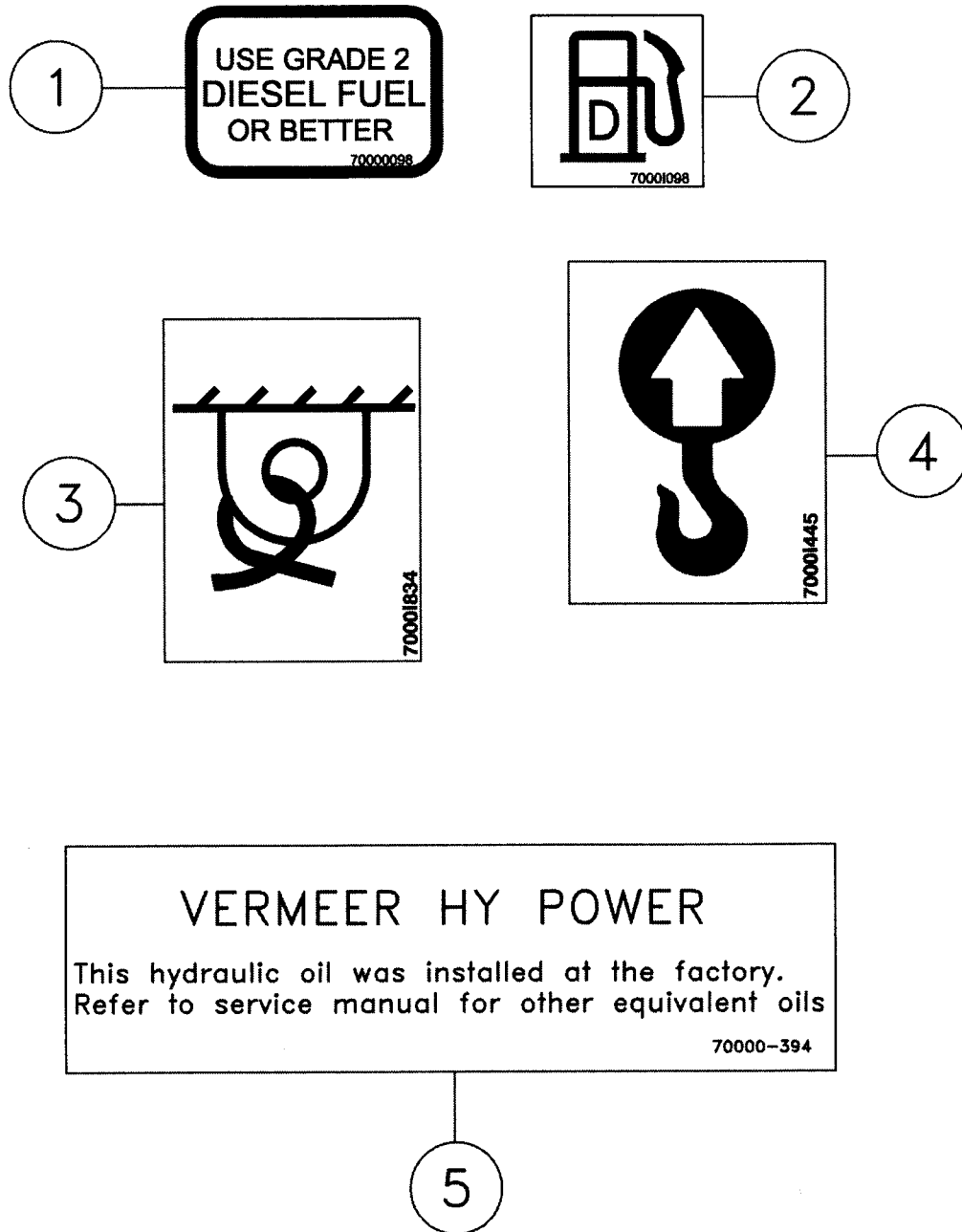
Miscellaneous Fig 2-8r01



## Miscellaneous Fig 2-8r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Added Decal
1		70000098	DECAL-DIESEL (AT/UND)	1	Domestic
2		7000I098	DECAL-DIESEL FUEL	1	International
3		7000I834	DECAL - TIE DOWN POINT	4	Domestic/International
4		7000I445	DECAL-LIFT POINT	4	Domestic/International
5		70000394	DECAL-VERMEER HY POWER	1	Domestic/International
6		700ID745	DECAL-ROD POSITIONER	1	Domestic/International
7		700IB794	DECAL- SOUND POWER LEVEL (108)	1	International
8	*	7000D814	DECAL - DIESEL FUEL SPECIFICATION	1	Domestic/International

Miscellaneous Fig 2-8





## Miscellaneous Fig 2-8

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		70000098	DECAL-DIESEL (AT/UND)	1	Domestic
2		70001098	DECAL-DIESEL FUEL	1	International
3		70001834	DECAL - TIE DOWN POINT	4	Domestic/International
4		70001445	DECAL-LIFT POINT	4	Domestic/International
5		70000394	DECAL-VERMEER HY POWER	1	Domestic/International

## Miscellaneous Fig 2-9

This product may be covered by one or more of the following patents:

AU 756 936	US 5,553,407	US 6,332,502	US 6,533,052	US 6,880,430
CA D 79 593	US 5,556,253	US 6,357,537	US 6,554,082	US 6,886,644
CC 961801735	US 5,574,642	US 6,360,830	US 6,557,651	US 6,910,541
CC ZL00818814.9	US 5,590,041	US 6,367,564	US 6,577,954	US 6,929,075
CC ZL01801755.X	US 5,607,280	US 6,374,928	US 6,585,062	US 6,948,265
CC ZL01809457.0	US 5,611,496	US 6,382,330	US 6,588,516	US 6,975,942
DE 696 11 846.7	US 5,659,985	US 6,389,360	US 6,651,755	US 7,036,609
DE 202 14 959.5	US 5,687,807	US 6,390,207	US 6,659,202	US 7,044,684
DE Des. 96 006 85	45,704,142	US 6,408,952	US 6,668,946	US 7,055,270
DE 600066479	US 5,720,354	US 6,408,954	US 6,684,538	US RE39,259
EP 772 543	US 5,746,278	US 6,435,286	US 6,701,647	US 7,121,363
EP 830 522	US 5,768,811	US 6,439,319	US 6,719,069	US 7,143,844
EP 885 343	US 5,778,991	US 6,446,365	US 6,725,579	US 7,152,348
EP 1 153 194	US 5,819,859	US 6,454,025	US 6,729,050	US 7,172,035
EP 1 242 710	US 5,904,210	US 6,470,976	US 6,749,029	US 7,182,151
GB 2 053 636	US 5,944,121	US 6,474,931	US 6,751,553	WO N1468166
HK 1015859	US 6,109,367	US 6,474,932	US 6,751,893	
NL 1153194	US 6,119,376	US 6,477,795	US 6,752,043	
RU 2 158 952	US 6,154,987	US 6,484,818	US 6,755,263	
SW 524 375	US 6,161,630	US 6,491,115	US 6,766,869	
US Des. 396,837	US 6,195,922	US 6,497,296	US 6,804,903	
US 5,237,888	US 6,247,544	US 6,511,260	US 6,814,164	
US 5,291,964	US 6,289,997	US 6,516,899	US 6,833,795	
US 5,509,220	US 6,308,787	US 6,517,733	US 6,839,991	
US 5,544,055	US 6,315,062	US 6,533,046	US 6,845,825	

This product may be covered by one or more of the following licensed patents:

US 4,694,913	US 4,867,255	US 5,148,880	US 5,867,117
US 4,858,704	US 4,953,638	US 5,799,740	US 6,050,350

(OTHER U.S. AND FOREIGN PATENTS PENDING)

7008119 r8 J

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**NOTICE TO OWNER** - You are requested to notify Vermeer Manufacturing Company when you have purchased a used Vermeer machine. Notify the Customer Data Department by telephone: 800-829-0051 or 641-628-3141; email: [customerdata@vermeerfmfg.com](mailto:customerdata@vermeerfmfg.com); internet: [www.vermeer.com](http://www.vermeer.com) or [www.vermeerag.com](http://www.vermeerag.com); or, letter: Customer Data Dept., Vermeer Manufacturing Company, PO Box 200, Pella IA 50219 USA. Upon request, an owner of a used Vermeer machine will receive one free set of Operator's, Maintenance and Parts manuals.

**SPANISH:**

**AVISO AL PROPIETARIO** - Se solicita que notifique a Vermeer Manufacturing Company cuando haya comprado una máquina Vermeer usada. Notifique al departamento de datos del cliente por teléfono: 800-829-0051 ó 641-628-3141; por correo electrónico: [customerdata@vermeerfmfg.com](mailto:customerdata@vermeerfmfg.com); por internet: [www.vermeer.com](http://www.vermeer.com) o [www.vermeerag.com](http://www.vermeerag.com); o por carta: Customer Data Dept., Vermeer Manufacturing Company, PO Box 200, Pella IA 50219 EE.UU. Si lo solicita, el propietario de una máquina Vermeer usada recibirá un conjunto gratuito de manuales de operación, mantenimiento y piezas.

**GERMAN:**

**HINWEIS AN DEN EIGENTÖMER** - Wir bitten Sie, die Vermeer Manufacturing Company zu informieren, wenn Sie eine gebrauchte Vermeer-Maschine erwerben. Benachrichtigen Sie die Customer Data-Abteilung auf eine der folgenden Arten: Telefonisch unter der Rufnummer 800-829-0051 oder 641-628-3141, per E-Mail unter [customerdata@vermeerfmfg.com](mailto:customerdata@vermeerfmfg.com); per Internet unter [www.vermeer.com](http://www.vermeer.com) oder [www.vermeerag.com](http://www.vermeerag.com); oder schriftlich an die Postanschrift: Customer Data Dept., Vermeer Manufacturing Company, PO Box 200, Pella IA 50219 USA. Auf Anfrage erhält der Eigentümer einer gebrauchten Vermeer-Maschine einen kostenlosen Satz Benutzer-, Wartungs- und Ersatzteilehandbücher.

**FRENCH:**

**AVIS AU PROPRIÉTAIRE** - Vous êtes invité à avertir Vermeer Manufacturing Company lorsque vous venez de faire l'achat d'une machine Vermeer d'occasion. Veuillez avertir le service des données clientèle (Customer Data Department) par téléphone : 800-829-0051 ou 641-628-3141 ; par courriel : [customerdata@vermeerfmfg.com](mailto:customerdata@vermeerfmfg.com) ; sur Internet : [www.vermeer.com](http://www.vermeer.com) ou [www.vermeerag.com](http://www.vermeerag.com) ; ou par lettre : Customer Data Dept., Vermeer Manufacturing Company, PO Box 200, Pella IA 50219 É.-U. Sur demande, un propriétaire de machine Vermeer d'occasion recevra un jeu de manuels gratuits : manuel d'utilisation, manuel d'entretien et manuel de pièces détachées.

**ITALIAN:**

**AVVISO AL PROPIETARIO** - In caso di acquisto di una macchina Vermeer usata, è necessario informare la Vermeer Manufacturing Company, contattando il Reparto dati clienti tramite telefono: +1 800-829-0051 o +1 641-628-3141; email: [customerdata@vermeerfmfg.com](mailto:customerdata@vermeerfmfg.com); internet: [www.vermeer.com](http://www.vermeer.com) o [www.vermeerag.com](http://www.vermeerag.com); o posta: Customer Data Dept., Vermeer Manufacturing Company, PO Box 200, Pella IA 50219 USA. Su richiesta, il proprietario di una macchina Vermeer usata potrà ricevere gratuitamente i manuali dell'operatore e di manutenzione e il catalogo pezzi di ricambio.

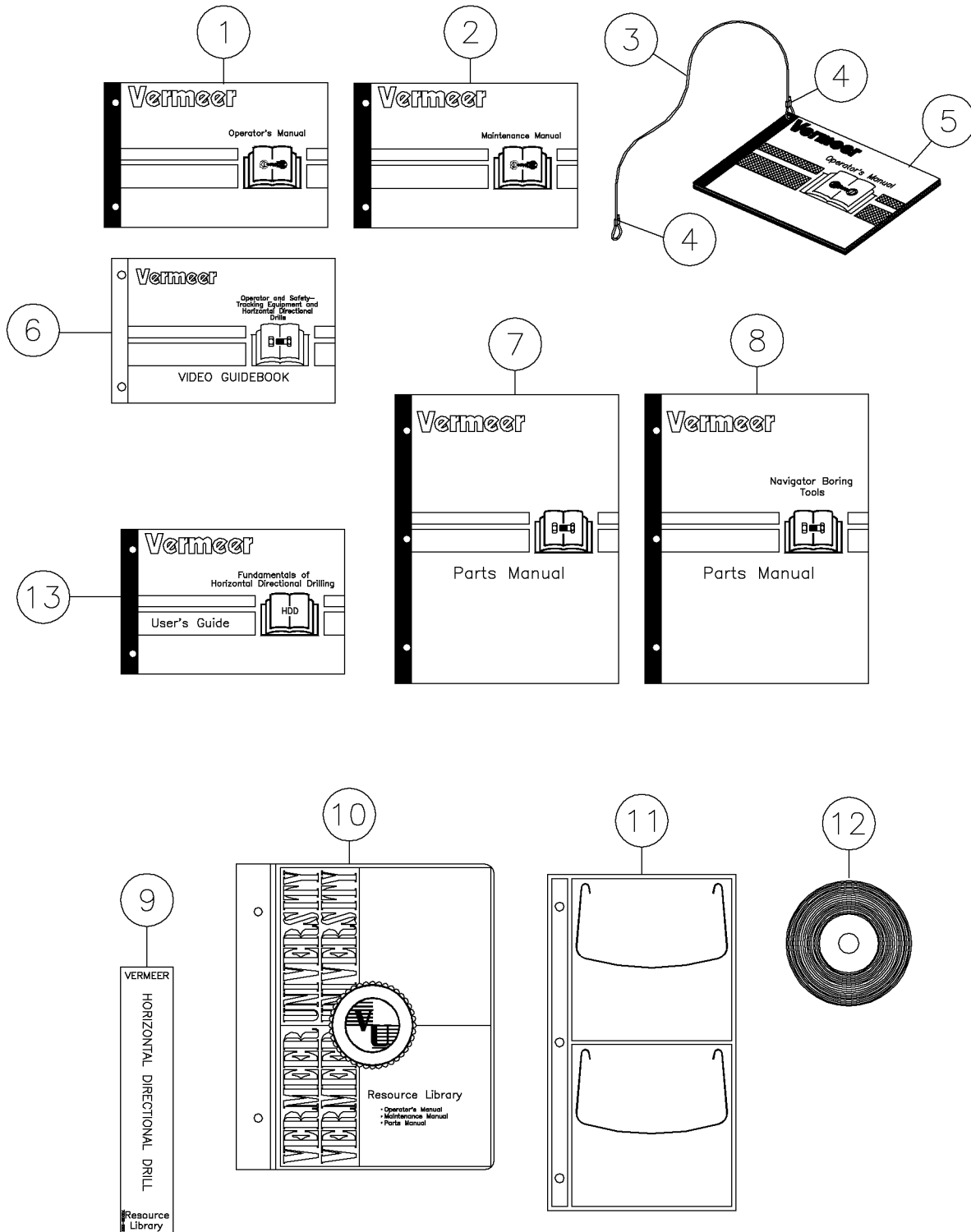
2326940

2

## Miscellaneous Fig 2-9

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		7000B119	DECAL - PATENT INDUSTRIAL	1	Domestic/International
2		2326940	DECAL-NOTICE TO OWNERS	1	Domestic/International

Resource Library Fig 2-10



Resource Library Fig 2-10

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		105400AD7	OM - D16X20II/D20X22II (EN) o1.00	1	
2		105400AD9	MM - D16X20II/D20X22II (EN) o1.00	1	
3		142954001	CABLE-.068DIA.NYLON CT.-36.00	1	
4		142423001	CRIMP-CABLE (FOR.068DIA.CABLE)	2	
5		296297000	MANUAL ASSY - D16X20II/D20X22II OM MINI CABLED 1.0	1	Inc. Ref. 3 & Two Of Ref. 4
6		105400T90	HDD OPERATIONS & SAFETY VIDEO GUIDEBOOK	1	
7		105400ZKO	PM - D20X22II (EN) 1ST	1	
8		105400T09	PM - NAVIGATOR BORING TOOLS p4.00	1	
9		7000B222	DECAL -HORIZONTAL DRILL - RESOURCE LIB.	1	
10		144144001	NOTEBOOK BINDER - 2"-3 XCX	1	
11		180010788	DVD-HOLDER	1	
12		296296910	HDD OPERATIONS & SAFETY DVD GUIDEBOOK	1	
13		105400W26	FUNDAMENTALS OF HDD UP o1.00	1	
		296306548	D20X22II RESOURCE LIBRARY		Inc. All Items In Figure.

Rack Fig 3-1r02

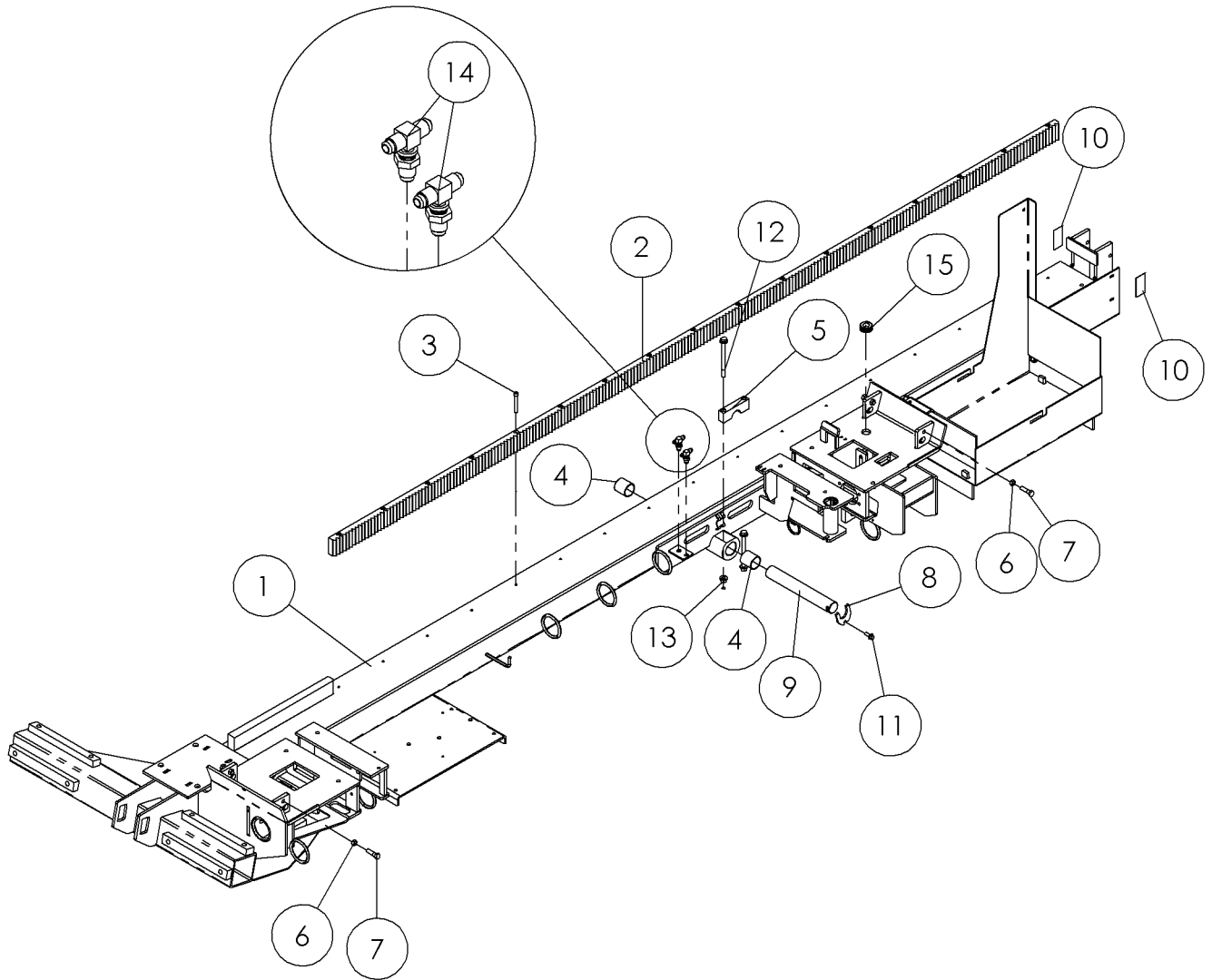
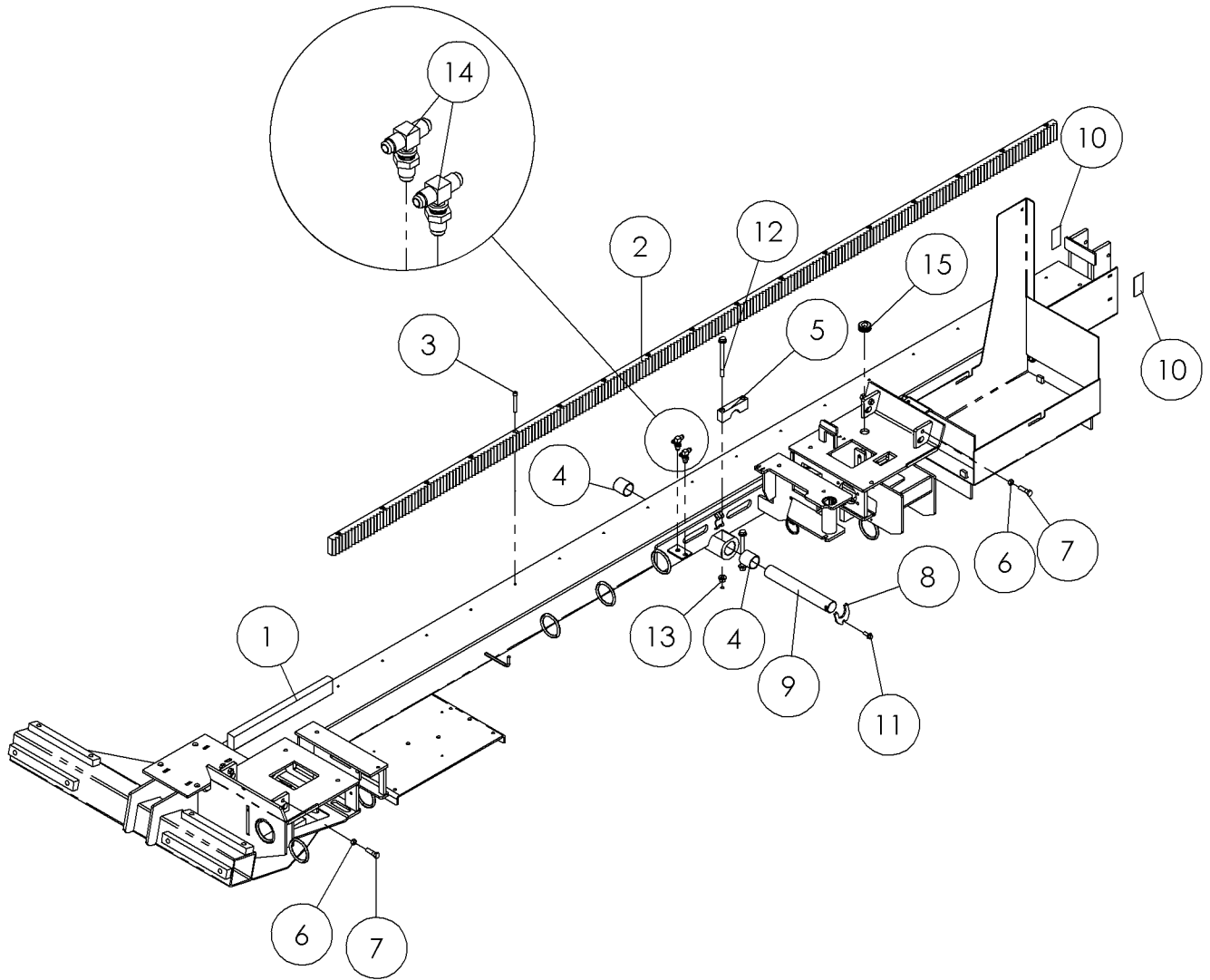


Illustration No. 296284498

## Rack Fig 3-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284399	*RACK - D20X22	1	
2		288122001	GEAR-RACK	1	
3		4478030	SCREW-3/8-16X3 SOCKET HEAD CAP	17	
4		70070005	BEARING-COMPOSITE 2 LONG	2	
5		296266551	PIVOT - TOP CAP	2	
6		75383001	NUT-1/2-UNC GR.8 JAM HEX	8	
7		240334001	SCREW-HCS-.50-13X1.75-GR8-YZ	4	
8		296293918	PLATE - PIN LOCK	1	
9		296293917	PIN - RACK LIFT	1	
10		7000A864	DECAL-WARNING DOMESTIC	2	Domestic
10		700IA864	DECAL-WARNING INTERNATIONAL	2	International
11		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
12		296300916	SCREW-HFS.50-13X6.00-GR8-YZ	4	
13		296300851	NUT-HEXFLGTL-.50-13-G-YZ	4	
14		60726001	6M JIC BULKHEAD TEE	2	
15		146174001	GROMMET	2	

Rack Fig 3-1r01





## Rack Fig 3-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Remove Poly Plug
1		296284399	RACK - D20X22	1	
2		288122001	GEAR-RACK	1	
3		4478030	SCREW-3/8-16X3 SOCKET HEAD CAP	17	
4		70070005	BEARING-COMPOSITE 2 LONG	2	
5		296266551	PIVOT - TOP CAP	2	
6		75383001	NUT-1/2-UNC GR.8 JAM HEX	8	
7		240334001	SCREW-HCS-.50-13X1.75-GR8-YZ	4	
8		296293918	PLATE - PIN LOCK	1	
9		296293917	PIN - RACK LIFT	1	
10		7000A864	DECAL-WARNING DOMESTIC	2	Domestic
		700IA864	DECAL-WARNING INTERNATIONAL	2	International
11		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
12		296300916	SCREW-HFS.50-13X6.00-GR8-YZ	4	
13		296300851	NUT-HEXFLGTL-.50-13-G-YZ	4	
14		60726001	6M JIC BULKHEAD TEE	2	
15		146174001	GROMMET	2	

Rack Fig 3-1

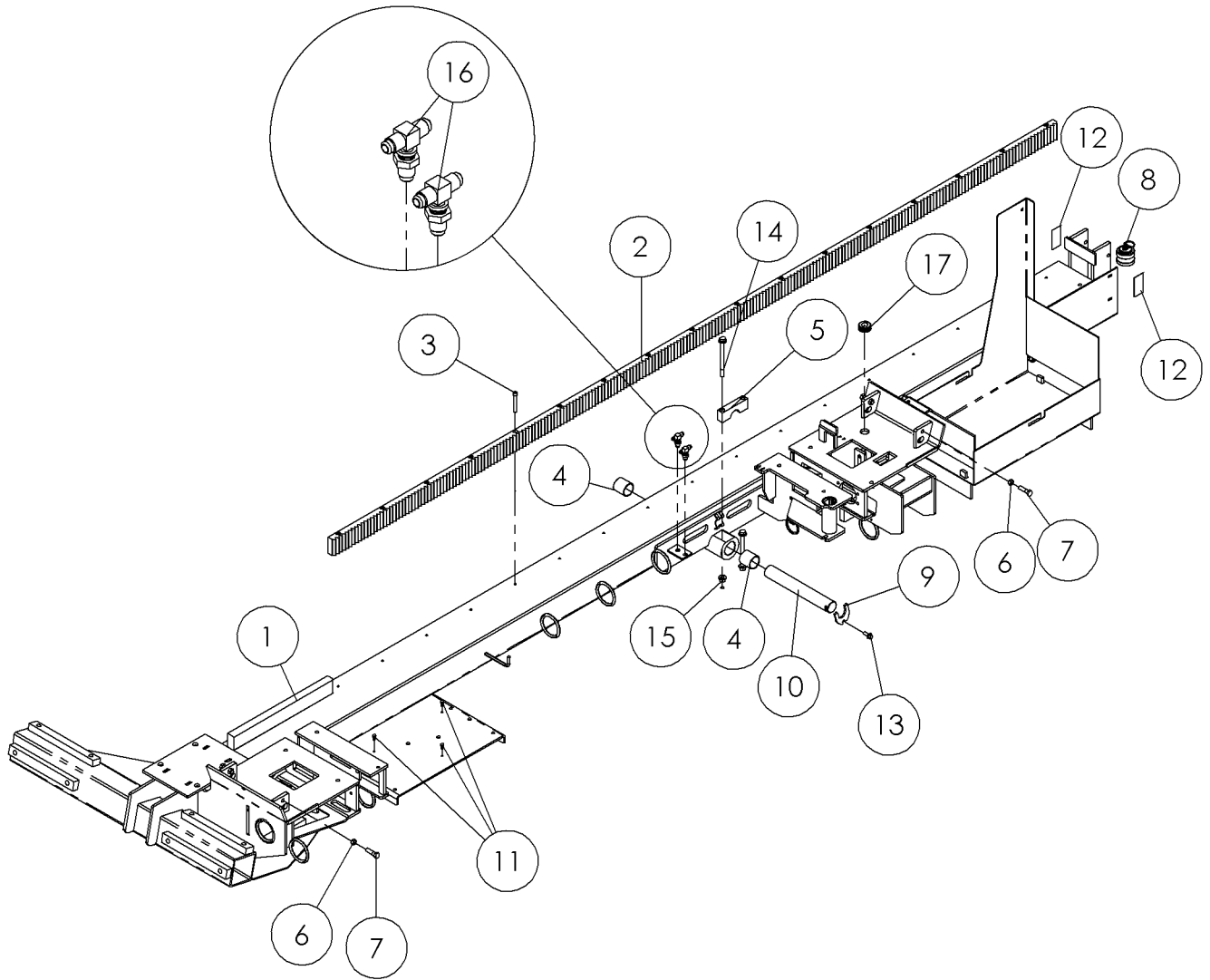


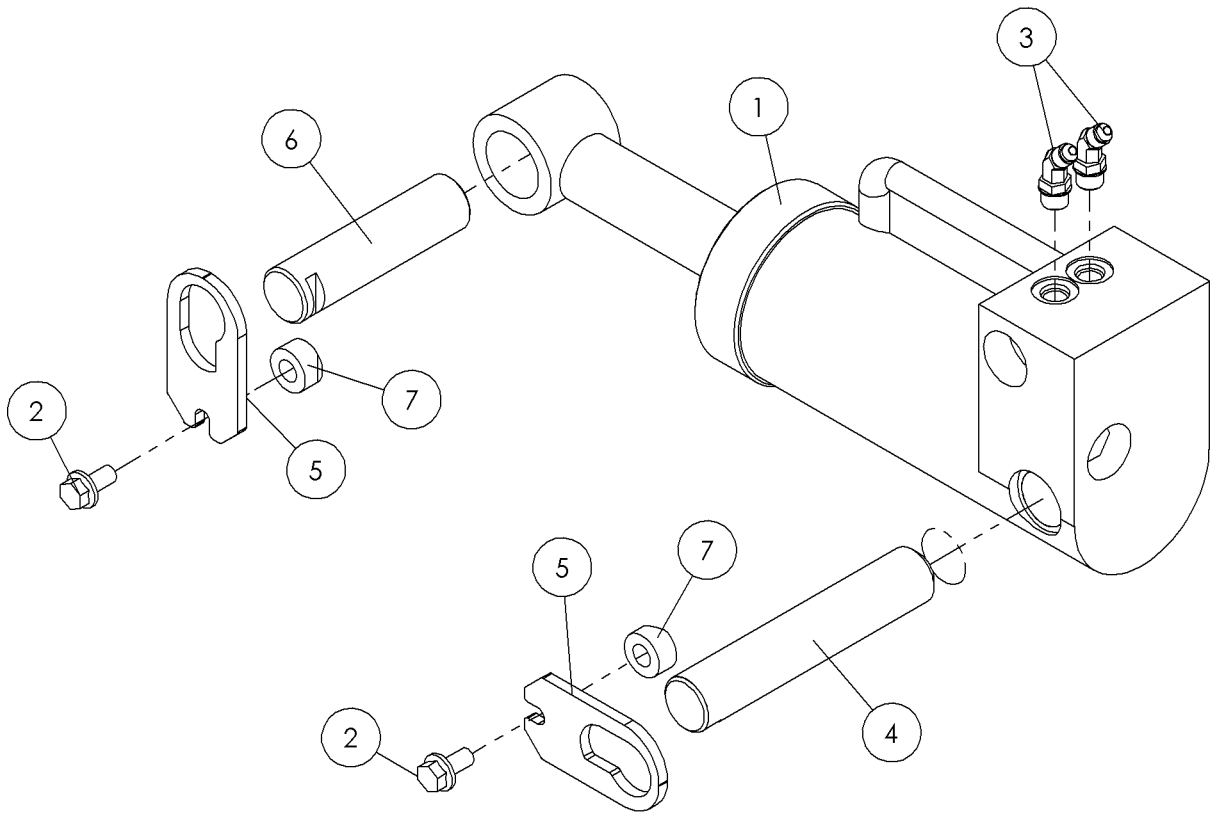
Illustration No. 296284498

Rack Fig 3-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Updated Illustration
1		296284399	RACK - D20X22	1	
2		288122001	GEAR-RACK	1	
3		4478030	SCREW-3/8-16X3 SOCKET HEAD CAP	17	
4		70070005	BEARING-COMPOSITE 2 LONG	2	
5		296266551	PIVOT - TOP CAP	2	
6		75383001	NUT-1/2-UNC GR.8 JAM HEX	8	
7		240334001	SCREW-HCS-.50-13X1.75-GR8-YZ	4	
8		225842001	PLUG-2" (POLY)	1	
9		296293918	PLATE - PIN LOCK	1	
10		296293917	296291813	1	
11		278953001	ANCHOR - CABLE TIE	3	
12		7000A864	DECAL-WARNING DOMESTIC	2	Domestic
		700IA864	DECAL-WARNING INTERNATIONAL	2	International
13		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
14		296300916	SCREW-HFS.50-13X6.00-GR8-YZ	4	
15		296300851	NUT-HEXFLGTL-.50-13-G-YZ	4	
16		60726001	6M JIC BULKHEAD TEE	2	
17		146174001	GROMMET	2	

Rack Cylinder (S/N 293-) Fig 3-2r01

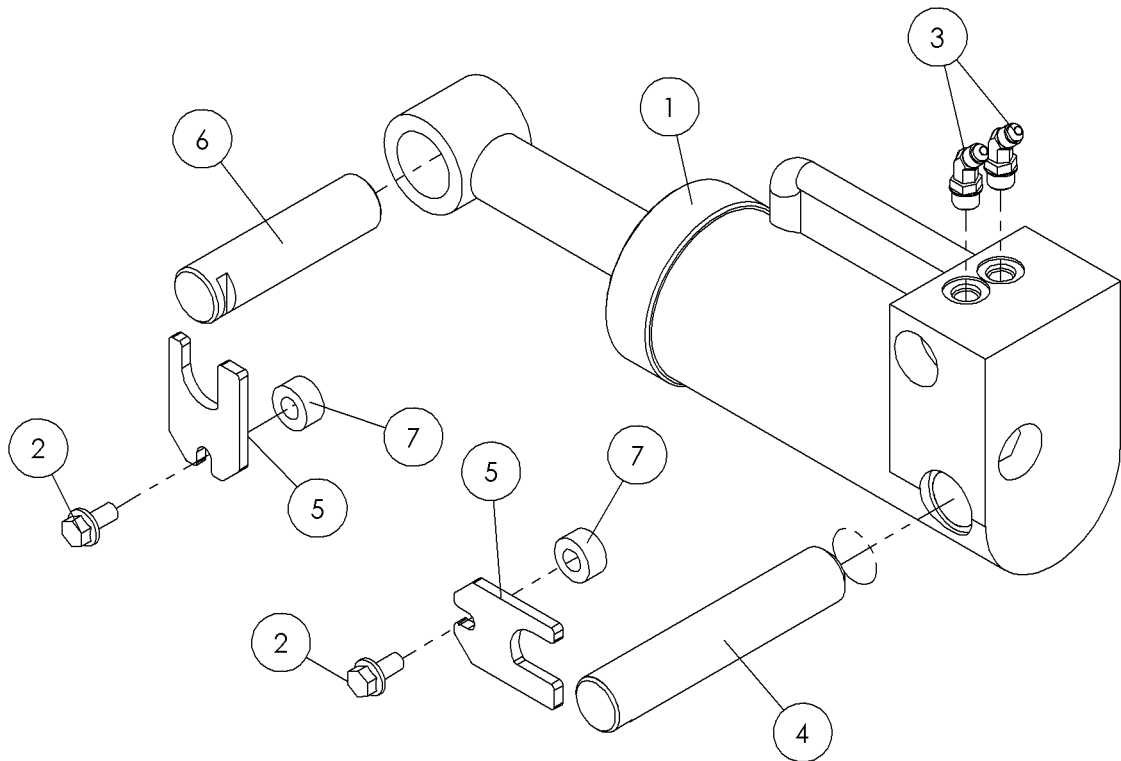
Illustration No. 296288691



## Rack Cylinder (S/N 293-) Fig 3-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296270800	CYLINDER - 3.50 X 4.00 HYD.	1	Breakdown Fig. 3-2z01
2		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
3		82931001	FITTING-45-4MJX6MORBA	2	
4		296296121	PIN - OUTRIGGER CYL	1	
5		296293878	*PLATE - PIN LOCK	2	
6		296296122	PIN - RACK CYLINDER	1	
7		252459001	TUBE - 1 OD X 1/2 ID - 1/2"	2	

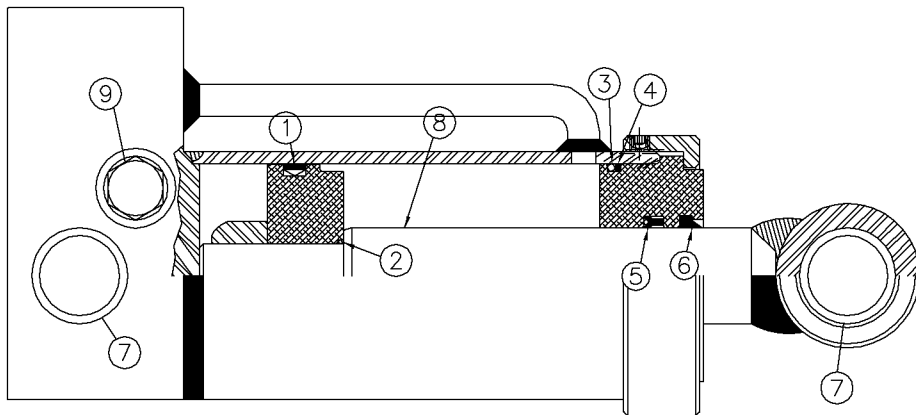
Rack Cylinder (S/N 101-292) Fig 3-2



## Rack Cylinder (S/N 101-292) Fig 3-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Change Qty. Of Tube
1		296270800	CYLINDER - 3.50 X 4.00 HYD.	1	Breakdown Fig. 3-2a
2		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
3		82931001	FITTING-45-4MJX6MORBA	2	
4		296296121	PIN - OUTRIGGER CYL	1	
5		296293878	PLATE - PIN LOCK	2	
6		296296122	PIN - RACK CYLINDER	1	
7	*	252459001	TUBE - 1 OD X 1/2 ID - 1/2"	2	

Components-Rack Cylinder Fig 3-2z01





## Components-Rack Cylinder Fig 3-2z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	UNI-RING	1	Not Sold Separately
2		NSS	O-RING	1	Not Sold Separately
3		NSS	O-RING	1	Not Sold Separately
4		NSS	WASHER-BACKUP	1	Not Sold Separately
5		NSS	U-CUP	1	Not Sold Separately
6		NSS	ROD WIPER	1	Not Sold Separately
7		216772011	BUSHING-SELF LUBRICATING	4	
8		296271025	ROD ASSEMBLY	1	Inc Ref. 7
9		278769019	VALVE	2	
		278769021	REPAIR KIT	2	
		94464003	REPAIR KIT-CYL.		Inc Ref. 1-6
		296270800	CYLINDER - 3.50 X 4.00 HYD.		Inc All Items In Figure.

Undercarriage (S/N 202-) Fig 3-3r02

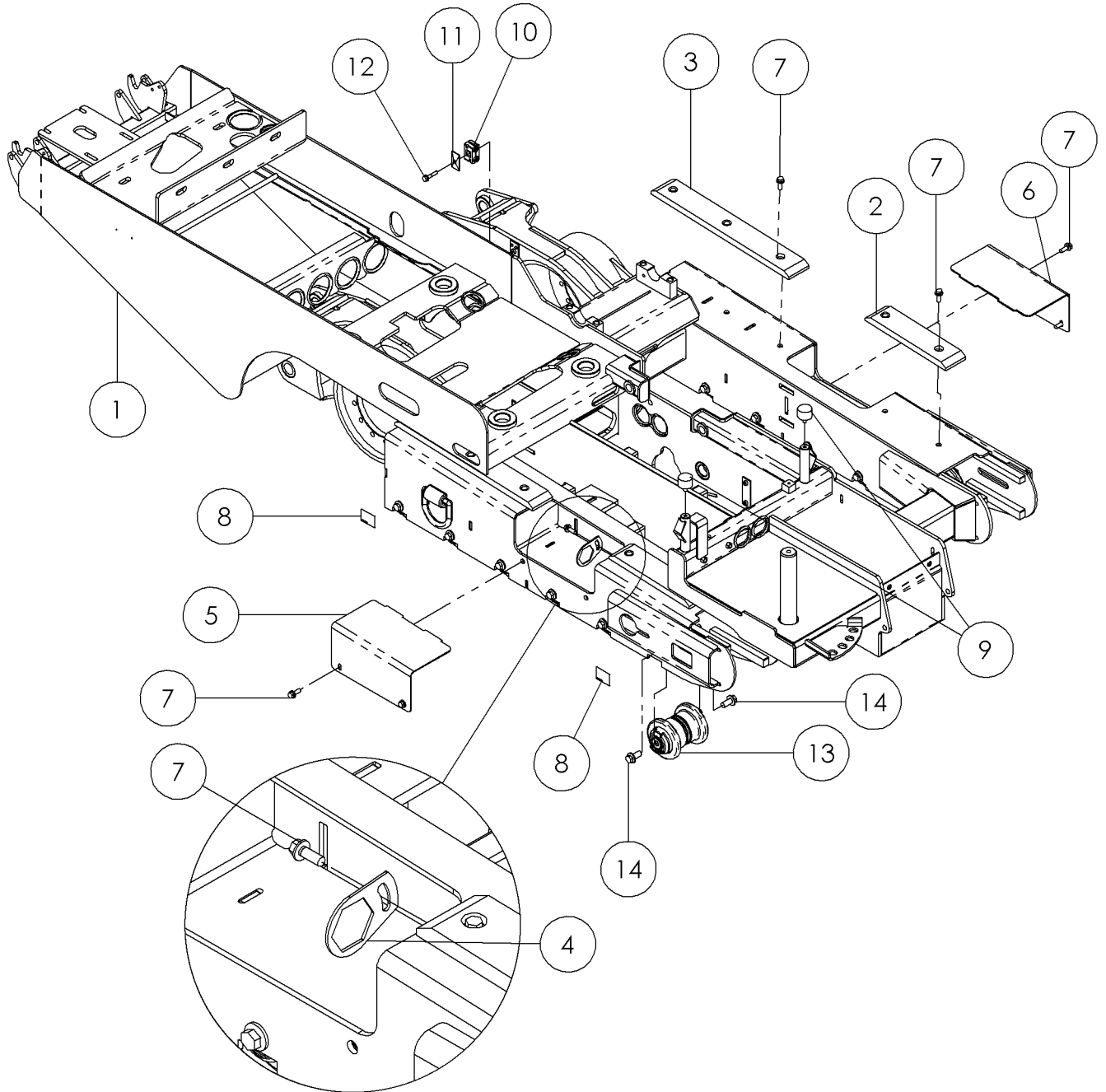


Illustration No. 296288550

Undercarriage (S/N 202-) Fig 3-3r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	April, 2008		Change Weldment
1		296288556	UNDERCARRIAGE - D20X22II	1	(S/N 202-)
2		296276616	RAIL - WEAR SHORT	2	
3		296276615	RAIL - WEAR LONG	2	
4		296296004	PLATE - NUT LOCK	2	
5		296288608	COVER - TRACK TENSION	1	
6		296288659	COVER - TRACK TENSION	1	
7		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	16	
8		7000I834	DECAL - TIE DOWN POINT	4	
9		122474001	MOUNT-SANDWICH SINGLE STUD	2	
10		900035005	CLAMP-HALF 3/8" DOUBLE (PAIR)	1	
11		900035003	DOUBLE HOSE CLAMP PLATE 3/8	1	
12		296300765	SCREW-FS-.31-18X1.50-GR8-YZ	1	
13		296296139	ROLLER - BERCO TRACK	12	
14		296300912	SCREW-HFS-M14-2.0X30-10.9-YZ-DIN6921	24	

Undercarriage (S/N 137-201) Fig 3-3r01

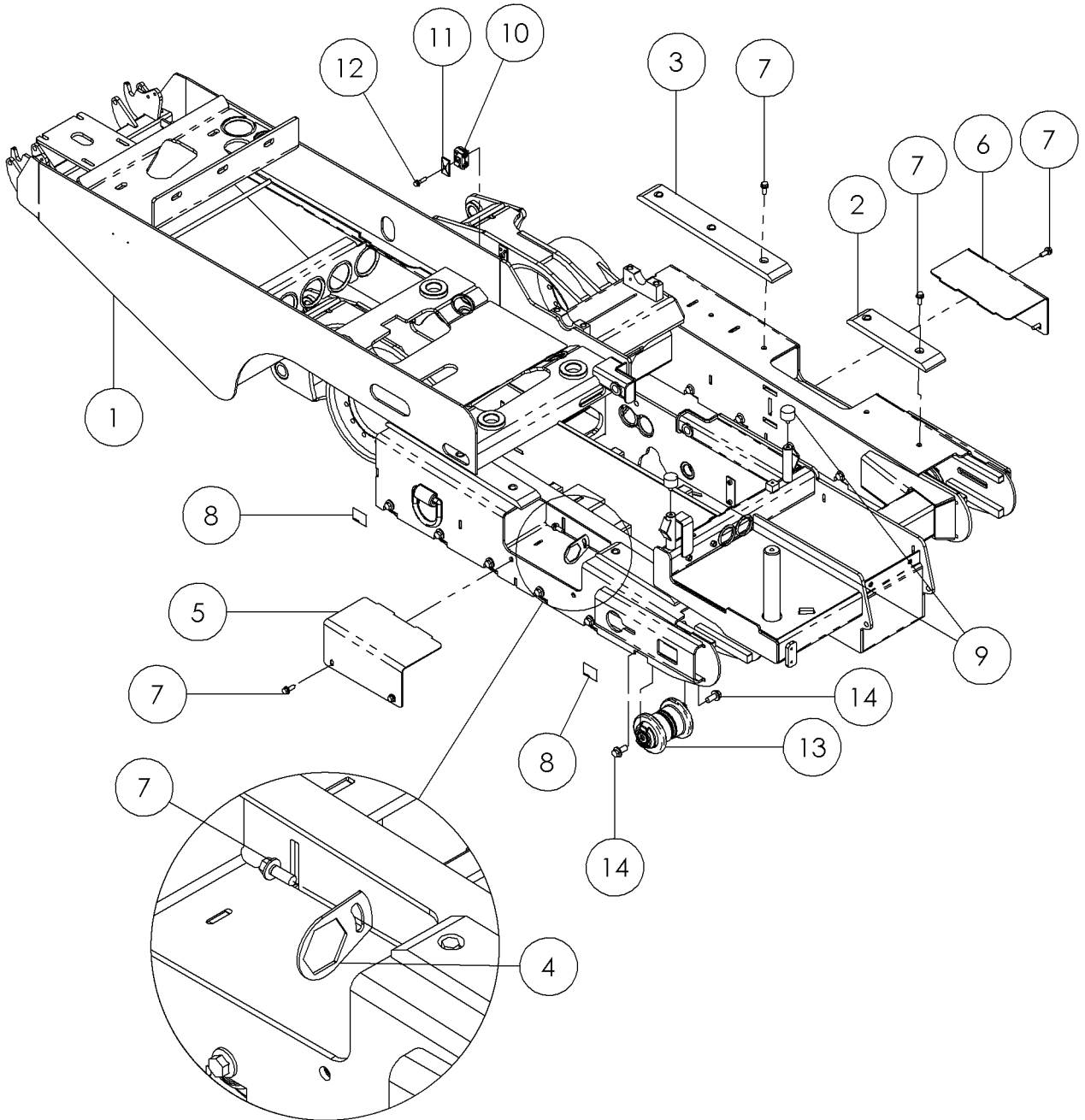


Illustration No. 296288550

## Undercarriage (S/N 137-201) Fig 3-3r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Change Weldment
1	*	296288556	UNDERCARRIAGE - D20X22II	1	(SN 137- )
2		296276616	RAIL - WEAR SHORT	2	
3		296276615	RAIL - WEAR LONG	2	
4		296296004	PLATE - NUT LOCK	2	
5		296288608	COVER - TRACK TENSION	1	
6		296288659	COVER - TRACK TENSION	1	
7		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	16	
8		7000I834	DECAL - TIE DOWN POINT	4	Domestic/International
9		122474001	MOUNT-SANDWICH SINGLE STUD	2	
10		900035005	CLAMP-HALF 3/8" DOUBLE (PAIR)	1	
11		900035003	DOUBLE HOSE CLAMP PLATE 3/8	1	
12	*	296300765	SCREW-HFS-.31-18X1.25-GR8-YZ	1	
13		296296139	ROLLER - BERCO TRACK	12	
14		296300912	SCREW-HFS-M14-2.0X30-10.9-YZ-DIN6921	24	

Undercarriage (S/N 101-136) Fig 3-3

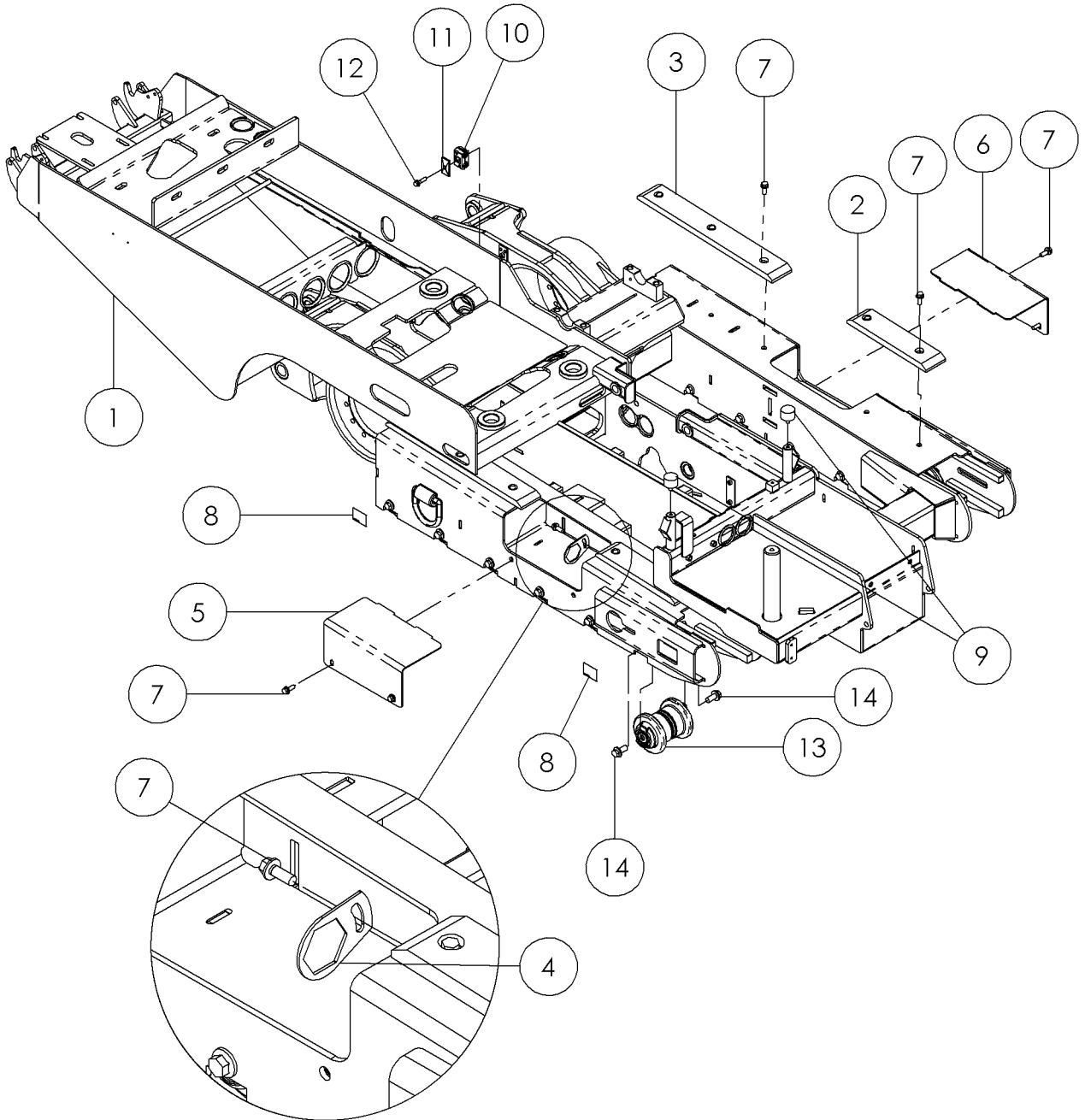


Illustration No. 296288550

## Undercarriage (S/N 101-136) Fig 3-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Updated Weldment
1	*	296288556	UNDERCARRIAGE - D20X22II	1	
2		296276616	RAIL - WEAR SHORT	2	
3		296276615	RAIL - WEAR LONG	2	
4		296296004	PLATE - NUT LOCK	2	
5		296288608	COVER - TRACK TENSION	1	
6		296288659	COVER - TRACK TENSION	1	
7		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	16	
8		7000I834	DECAL - TIE DOWN POINT	4	Domestic/International
9		122474001	MOUNT-SANDWICH SINGLE STUD	2	
10		900035005	CLAMP-HALF 3/8" DOUBLE (PAIR)	1	
11		900035003	DOUBLE HOSE CLAMP PLATE 3/8	1	
12		296300764	SCREW-HFS-.31-18X1.25-GR8-YZ	1	
13		296296139	ROLLER - BERCO TRACK	12	
14		296300912	SCREW-HFS-M14-2.0X30-10.9-YZ-DIN6921	24	

Idler (S/N 253-) Fig 3-4r04

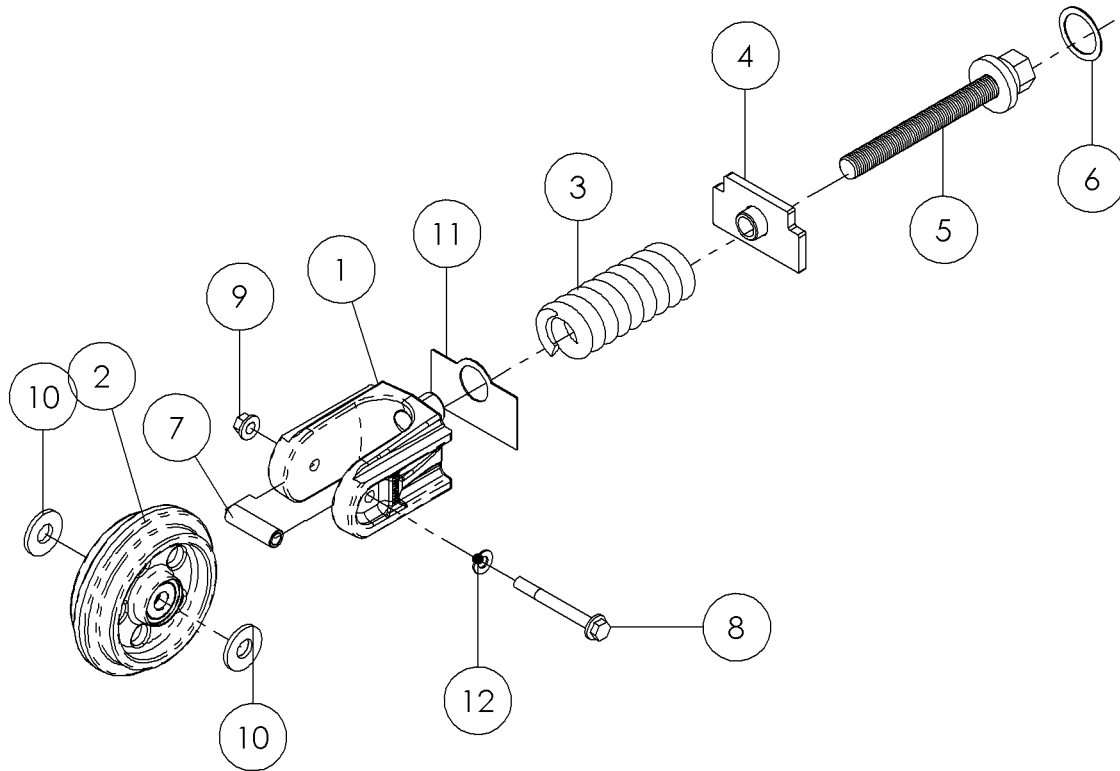


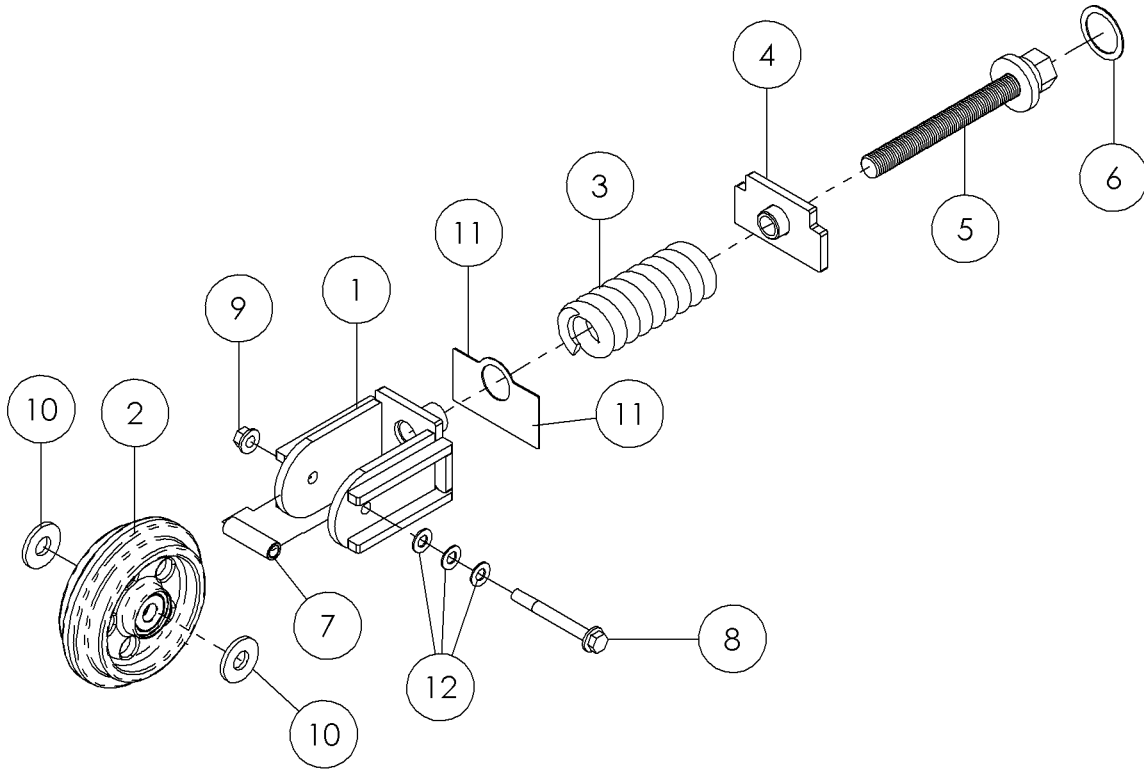
Illustration No. 296288588



## Idler (S/N 253-) Fig 3-4r04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	June, 2008		Replaced Part
1	*	296296016	SLIDE IDLER - MACH	1	(S/N 253-)
2		296308053	ASSEMBLY - TRACK IDLER QUAD BEARING	1	(S/N 192-)
3		289057001	SPRING - 3 5/16OD X 8 1/4H X 27/32 W	1	
4		296288668	TIGHTENER - SPRING	1	
5		296296003	SCREW - TRACK TIGHTENER	1	
6		483031	WASHER-3OD X2 1/4ID-14 GA MB	1	
7		296288663	BAR - ROLLER	1	
8		296300813	SCREW-HFS-.63-11X5.50-GR8-YZ	1	
9		296300852	NUT-HEXFLGTL-.63-11-G-YZ	1	
10		81819001	WASHER-2 1/2ODX1 1/16ID-1/4	2	
11		296296169	PLATE - GUIDE	1	
12		235715001	WASHER-FLATSTRL-5/8" YZ A325	3	

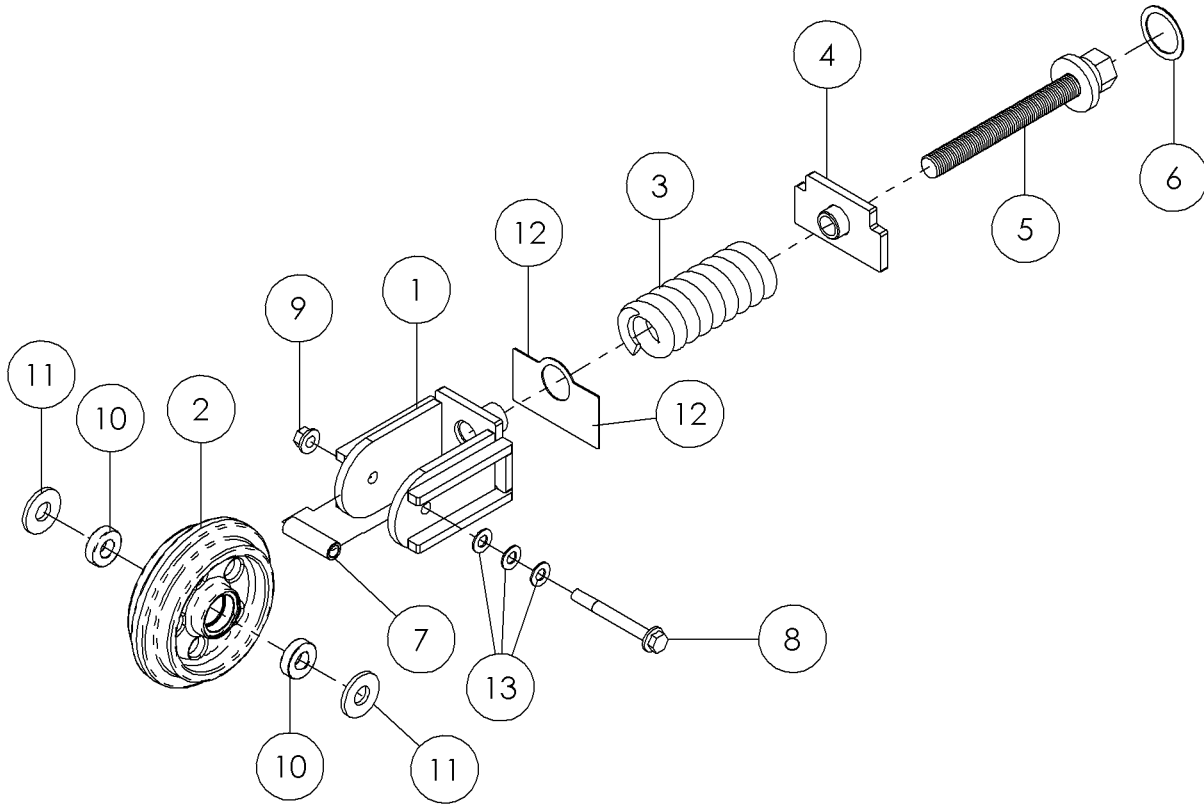
Idler (S/N 192-252) Fig 3-4r03



## Idler (S/N 192-252) Fig 3-4r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	April, 2008		Update In Illustration & Parts List.
1		296288590	SLIDE - IDLER	1	(S/N 141-)
2	*	296308053	ASSEMBLY - TRACK IDLER QUAD BEARING	1	(S/N 192-)
3		289057001	SPRING - 3 5/16OD X 8 1/4H X 27/32 W	1	
4		296288668	TIGHTENER - SPRING	1	
5		296296003	SCREW - TRACK TIGHTENER	1	
6		483031	WASHER-3OD X2 1/4ID-14 GA MB	1	
7		296288663	BAR - ROLLER	1	
8		296300813	SCREW-HFS-.63-11X5.50-GR8-YZ	1	
9		296300852	NUT-HEXFLGTL-.63-11-G-YZ	1	
10		81819001	WASHER-2 1/2ODX1 1/16ID-1/4	2	
11		296296169	PLATE - GUIDE	1	
12		235715001	WASHER-FLATSTRL-5/8" YZ A325	3	

Idler (S/N 141-191) Fig 3-4r02



## Idler (S/N 141-191) Fig 3-4r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1	*	296288590	SLIDE - IDLER	1	(SN 141- )
2		296288662	TRACK IDLER	1	
3		289057001	SPRING-3 5/16OD X 8 1/4H X 27/32 W	1	
4		296288668	TIGHTENER - SPRING	1	
5		296296003	SCREW - TRACK TIGHTENER	1	
6		483031	WASHER-3OD X2 1/4ID-14 GA MB	1	
7		296288663	BAR - ROLLER	1	
8		296300813	SCREW-HFS-.63-11X5.50-GR8-YZ	1	
9		296300852	NUT-HEXFLGTL-.63-11-G-YZ	1	
10		230154001	BEARING-RADIAL BALL 25MM BORE	2	
11		81819001	WASHER-2 1/2ODX1 1/16ID-1/4	2	
12		296296169	PLATE - GUIDE	1	
13		235715001	WASHER-FLATSTRL-5/8" YZ A325	3	

Idler (S/N 101-140-) Fig 3-4r01

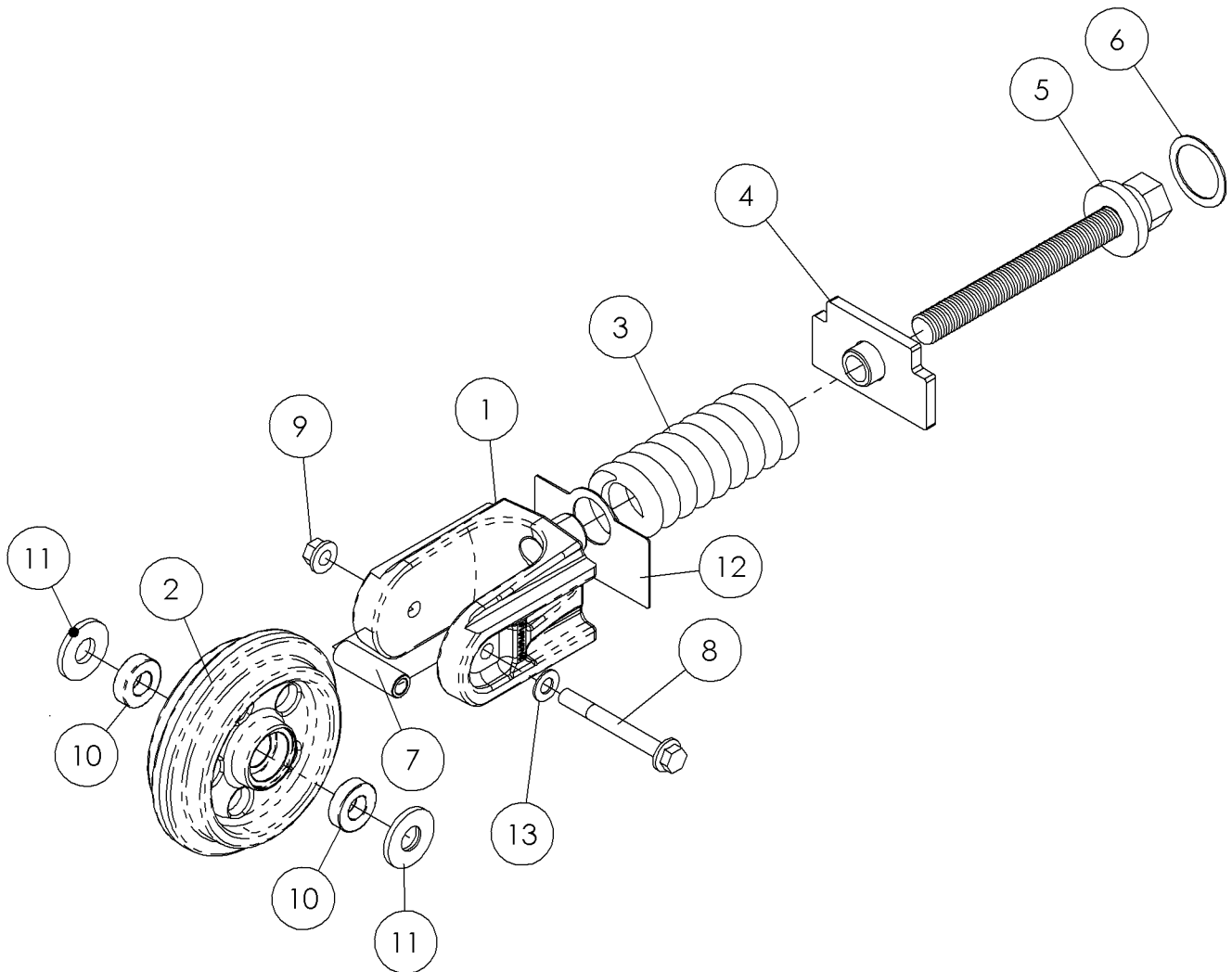


Illustration No. 296288588

## Idler (S/N 101-140-) Fig 3-4r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Change Hardware
1		296296016	SLIDE IDLER - MACH	1	
2		296288662	TRACK IDLER	1	
3		289057001	SPRING - 3 5/16OD X 8 1/4H X 27/32 W	1	
4		296288668	TIGHTENER - SPRING	1	
5		296296003	SCREW - TRACK TIGHTENER	1	
6		483031	WASHER-3OD X2 1/4ID-14 GA MB	1	
7		296288663	BAR - ROLLER	1	
8		296300813	SCREW-HFS-.63-11X5.50-GR8-YZ	1	
9		296300852	NUT-HEXFLGTL-.63-11-G-YZ	1	
10		230154001	BEARING-RADIAL BALL 25MM BORE	2	
11	*	81819001	WASHER-2 1/2ODX1 1/16ID-1/4	2	
12		296296169	PLATE - GUIDE	1	
13		235715001	WASHER-FLATSTRL-5/8" YZ A325	1	

Idler (S/N 101-140-) Fig 3-4

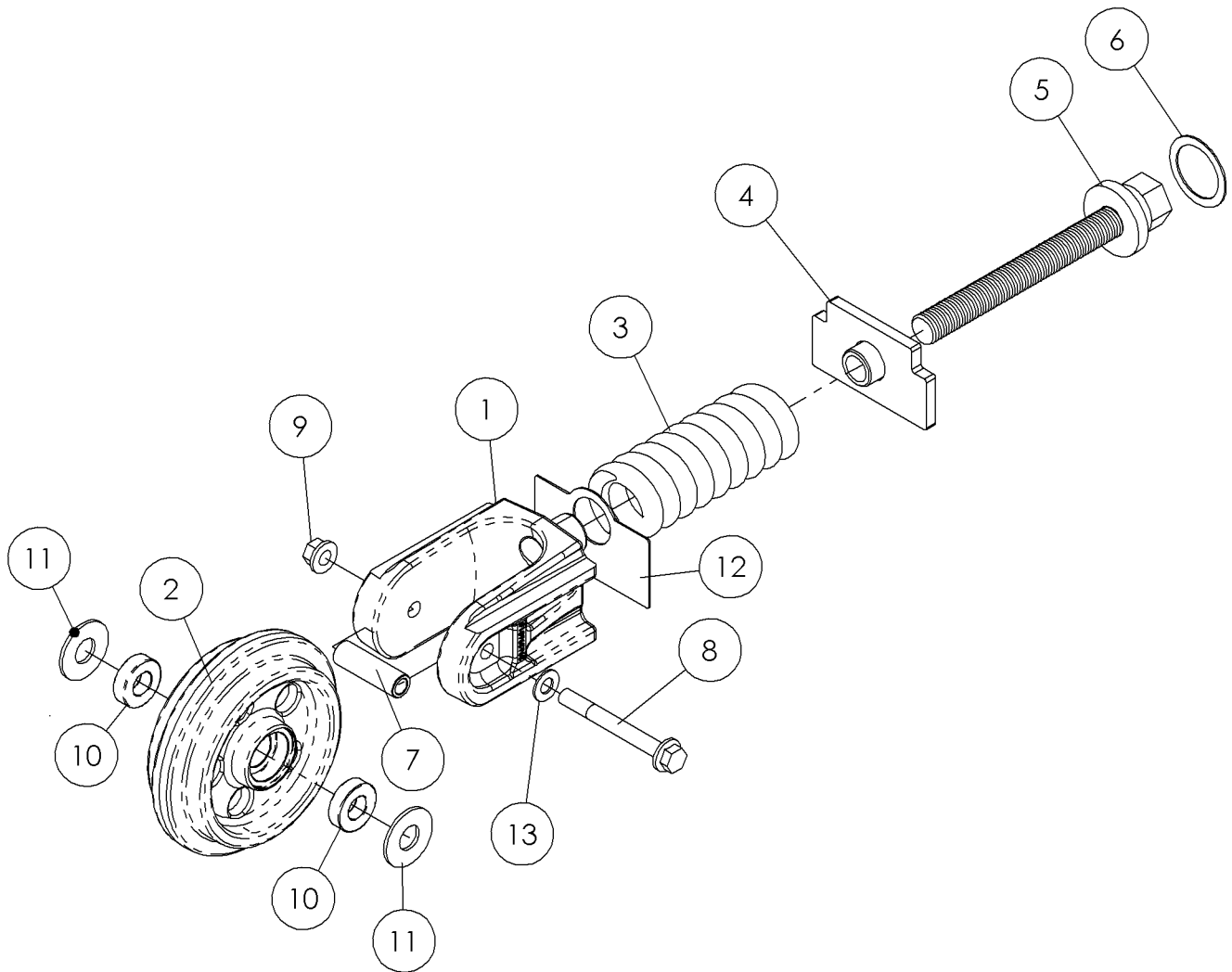


Illustration No. 296288588



## Idler (S/N 101-140-) Fig 3-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296296016	SLIDE IDLER - MACH	1	
2		296288662	TRACK IDLER	1	
3		289057001	SPRING - 3 5/16OD X 8 1/4H X 27/32 W	1	
4		296288668	TIGHTENER - SPRING	1	
5		296296003	SCREW - TRACK TIGHTENER	1	
6		483031	WASHER-3OD X2 1/4ID-14 GA MB	1	
7		296288663	BAR - ROLLER	1	
8		296300813	SCREW-HFS-.63-11X5.50-GR8-YZ	1	
9		296300852	NUT-HEXFLGTL-.63-11-G-YZ	1	
10		230154001	BEARING-RADIAL BALL 25MM BORE	2	
11		510337619	WASHER-FLATSTD-1.00-1.06X2.50-.15-YZ	2	
12		296296169	PLATE - GUIDE	1	
13		235715001	WASHER-FLATSTRL-5/8" YZ A325	1	

Rubber Track Fig 3-5

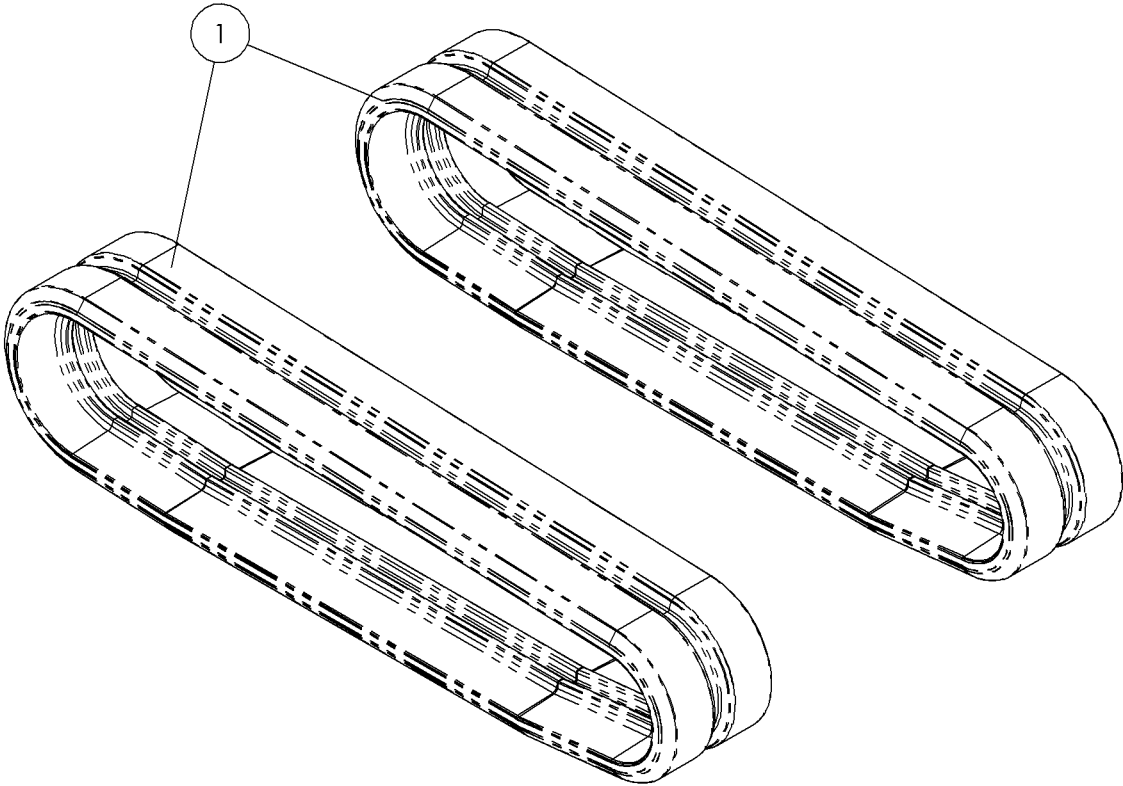


Illustration No. 296288688

Rubber Track Fig 3-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		296288576	TRACKS-RUBBER 300X74X52.5	2	

Track Drive-Planetary (S/N 173, 181, 185-) Fig 3-6r01

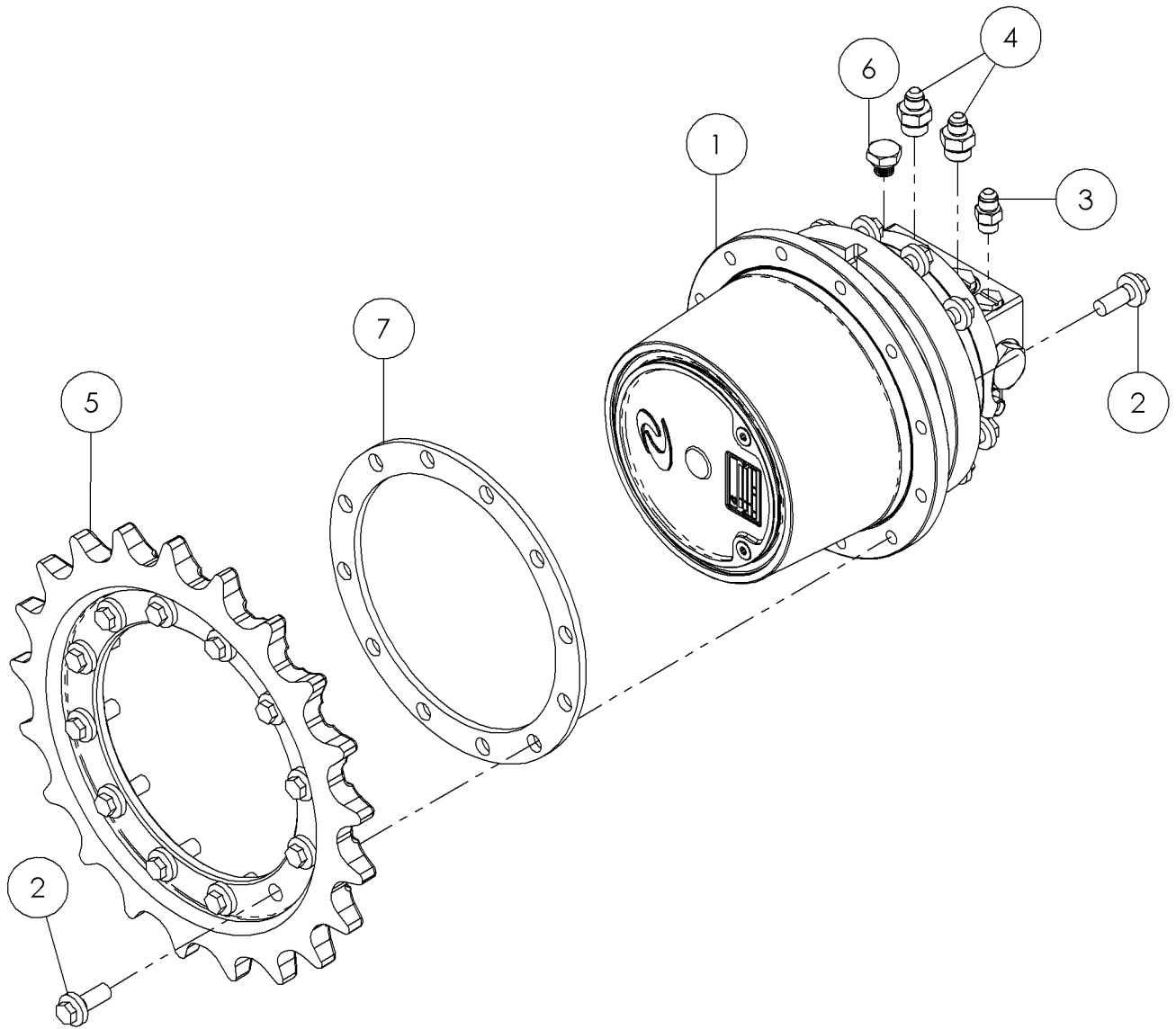
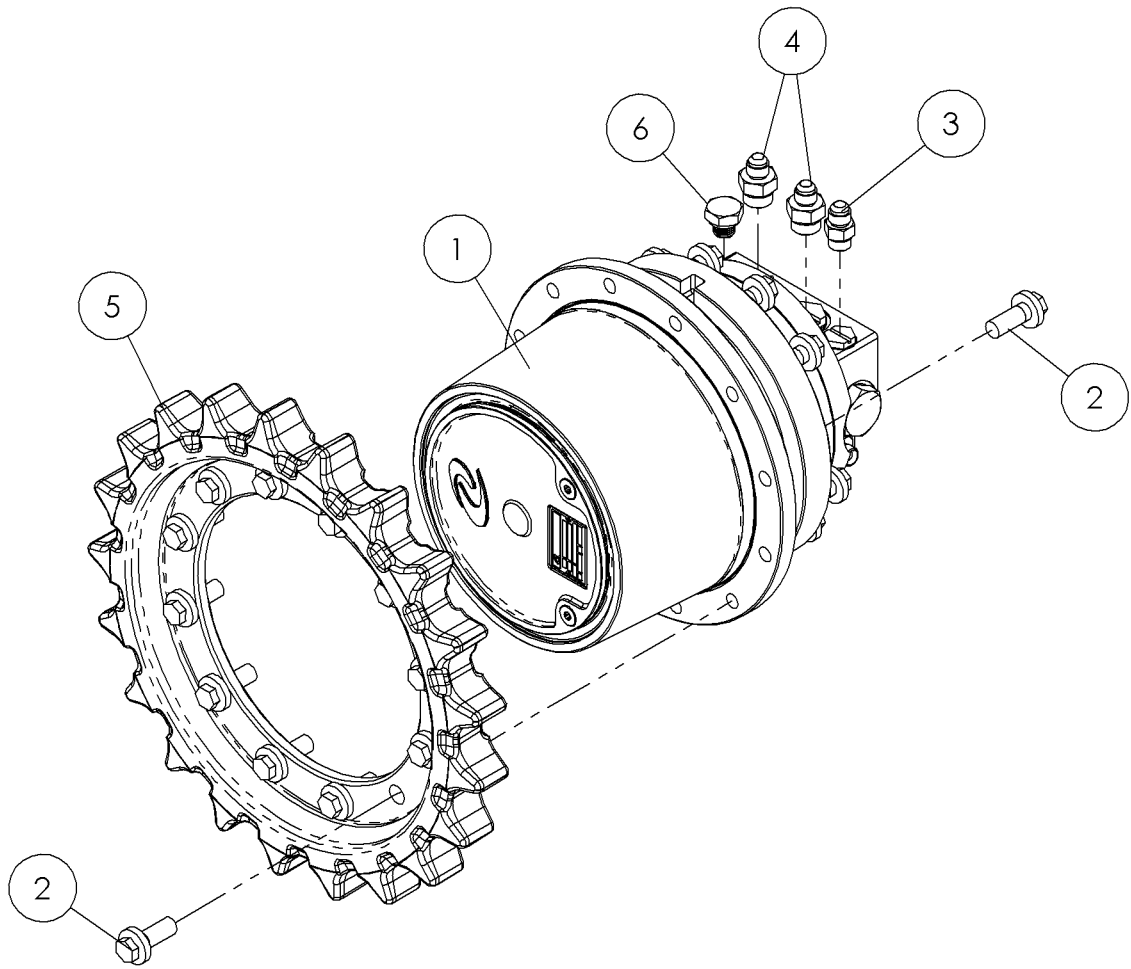


Illustration No. 296288690

## Track Drive-Planetary (S/N 173, 181, 185-) Fig 3-6r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Update In Illustration & Parts List.
1		296288581	PLANETARY	1	Breakdown Fig. 3-6a
2		507613030	SCREW-HFS,M12-1.75X30,10.9,YZ,ANSI,B18.2.3.9M,PT	24	
3		65565001	FITTING - 6M O-RING X 6M JIC ST.	1	
4		60247001	FITTING - 8M O-RING X 6M JIC ST.	2	
5	*	296308061	SPROCKET - 21 TOOTH MACHINED	1	(S/N 173, 181, 185-)
6		5553001	FITTING - PLUG - 6MORB - HEX	1	
7		296299191	PLATE - SPROCKET SPACER	1	

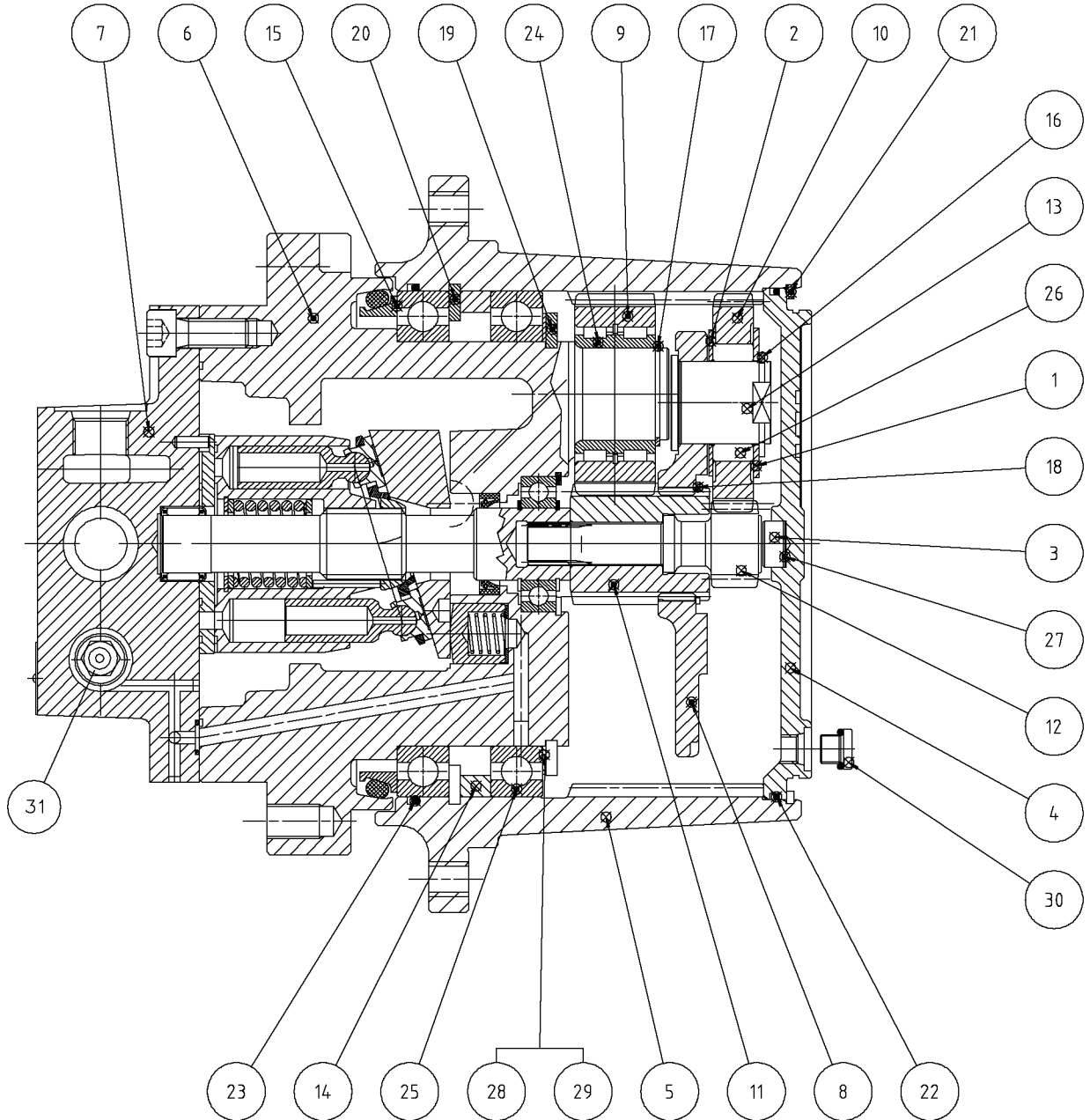
Track Drive-Planetary (S/N 101-172, 174-180, 182-184) Fig 3-6



## Track Drive-Planetary (S/N 101-172, 174-180, 182-184) Fig 3-6

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288581	PLANETARY	1	Breakdown Fig. 3-6a
2		507613030	SCREW-HFS,M12-1.75X30,10.9,YZ,ANSI,B18.2.3.9M,PT	24	
3		65565001	FITTING - 6M O-RING X 6M JIC ST.	1	
4		60247001	FITTING - 8M O-RING X 6M JIC ST.	2	
5		296296136	SPROCKET - 21 TOOTH	1	
6		5553001	FITTING - PLUG - 6MORB - HEX	1	

Components-Track Drive-Planetary Fig 3-6z01



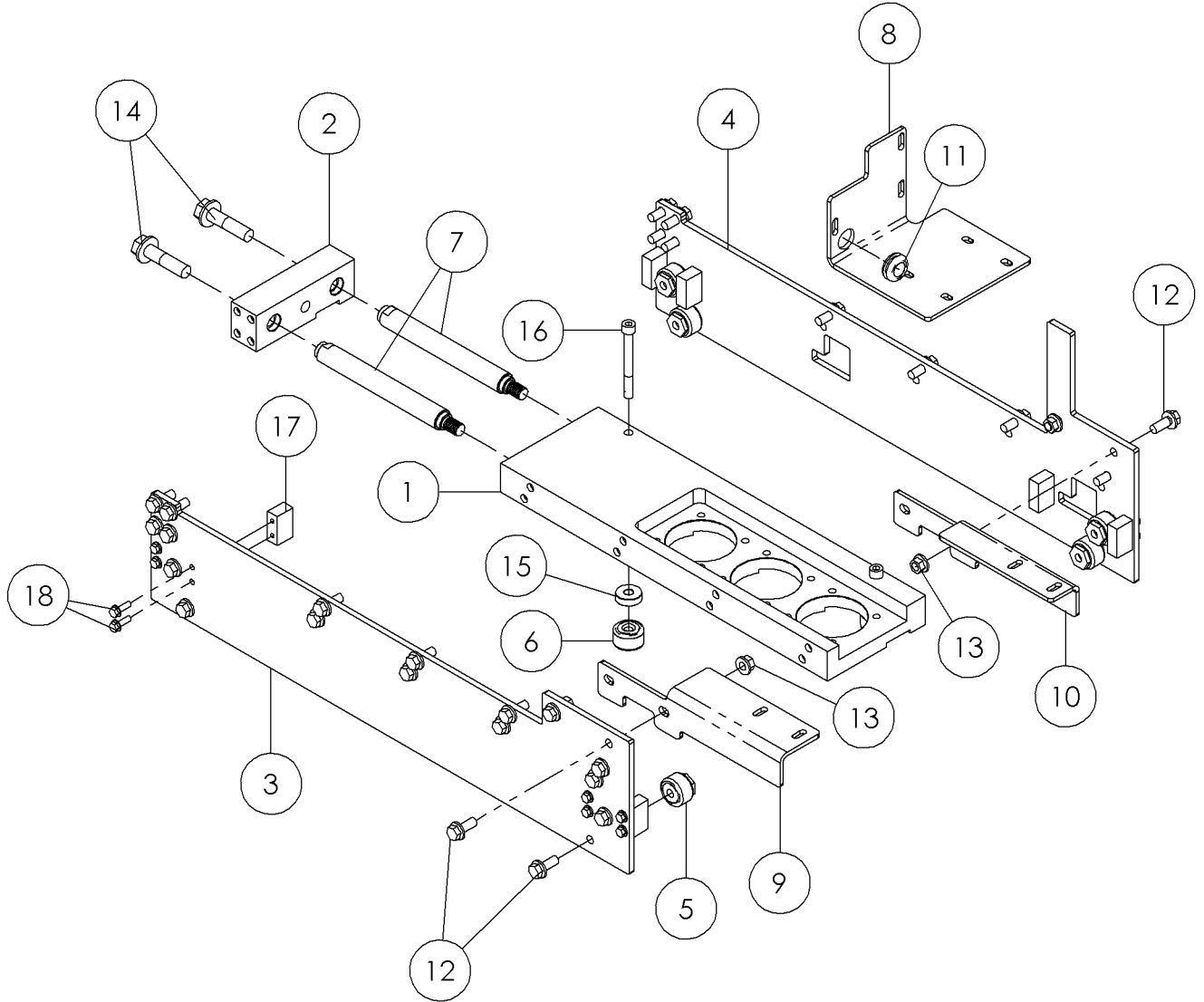


## Components-Track Drive-Planetary Fig 3-6z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		180006340	WASHER	3	
2		180006341	WASHER	3	
3		180006343	PAD D1 6X 8	1	
4		296302283	END COVER WITH PLUG	1	
5		296302284	OUTPUT HOUSING	1	
6		296302285	HUB	1	
7		296302286	MOTOR 25, 77/13,35 (3/4-16 UNF)	1	
8		296302282	PIN	1	
9		296302288	PLANET GEAR	3	
10		180006353	PLANET GEAR R.5,67	3	
11		180006355	SUN GEAR R.5,67	1	
12		296302289	SUN GEAR	1	
13		180006357	PIN	3	
14		180006358	SHIM	1	
15		180006396	BEARING	1	
16		180006397	EXTERNAL SNAP RING 29X2mm	3	
17		180006398	EXTERNAL SNAP RING 32	3	
18		180006399	EXTERNAL SNAP RING WR38	1	
19		180006361	EXTERNAL SNAP RING 140	1	
20		180006362	INTERNAL SNAP RING 175	1	
21		180006363	INTERNAL SNAP RING BR180	1	
22		180006364	O-RING (2,62X164,77)	1	
23		180006365	O-RING 3X174	1	
24		180006366	BEARING	3	
25		180006367	BALL BEARING	1	
26		296302290	NEEDLE BEARING 6X14	54	
27		180006369	SHIM KIT 8,2X14	1	
28		180006370	SHIM 140,3X159,6X0,3	1	
29		180006371	SHIM 140,3X159,6X0,95A4	1	
30		161215001	FITTING-PLUG-2MBSPP-HHP-YZ	2	
31		296302448	*HYD. FITTING	1	
		296288581	PLANETARY		Include All Items In Figure.
		296302291	BASIC SEAL KIT		
		296302292	MAJOR REBUILT KIT		Include Item 15

Rack Carriage (S/N 193-) Fig 3-7r02

Illustration No. 296284386



## Rack Carriage (S/N 193-) Fig 3-7r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284375	PLATE - TOP MOTOR MOUNT	1	
2		296284376	SLIDE MOUNT BAR CARRIAGE	1	
3		296284377	*PLATE - LEFT CARRIAGE	1	
4		296284378	*PLATE - RIGHT CARRIAGE	1	
5		296291810	ROLLER - 1.75 CAM THD	8	
6		296257282	BEARING - 1.75" OD ROLLER	2	
7		296281196	SLIDE ROD CARRIAGE	2	
8		296306355	PLATE - CARRIER MOUNT	1	
9		296306354	PLATE - LEFT CARRIER MOUNT	1	
10		296306356	PLATE - RIGHT CARRIER MOUNT	1	
11		1865017	GROMMET-7/8IDX1.25OD 1/4GROOVE	1	
12		296300789	SCREW-HFS-.50-13X1.25-GR8-YZ	36	
13		296300851	NUT-HEXFLGTL-.50-13-G-YZ	6	
14		296300821	SCREW-HFS-.75-10X3.00-GR8-YZ	2	
15		296293974	RBTB - 1.5" OD X .53" ID - .45	2	
16		296300943	SCREW - SHCS - .50 - 13X4.5 - GR8 - PLN	2	
17		296308040	SCRAPER - GEARBOX BEARING	8	
18		296300763	SCREW-HFS-.31-18X1.00-GR8-YZ	16	

Rack Carriage (S/N 101-192-) Fig 3-7r01

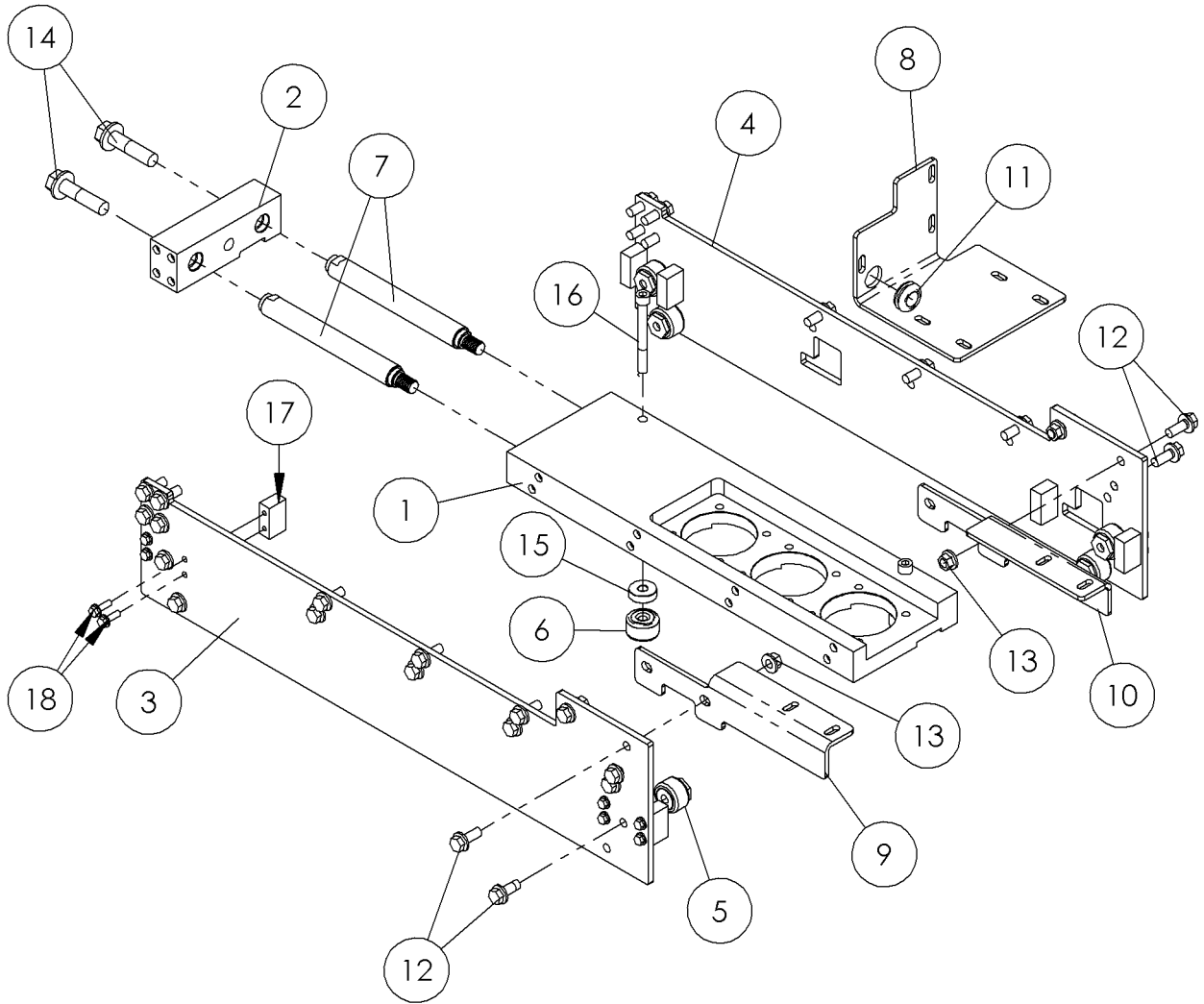


Illustration No. 296284386

## Rack Carriage (S/N 101-192-) Fig 3-7r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Added Parts
1		296284375	PLATE - TOP MOTOR MOUNT	1	
2		296284376	SLIDE MOUNT BAR CARRIAGE	1	
3	*	296284377	PLATE - LEFT CARRIAGE	1	
4	*	296284378	PLATE - RIGHT CARRIAGE	1	
5		296291810	ROLLER - 1.75 CAM THD	8	
6		296257282	BEARING - 1.75" OD ROLLER	2	
7		296281196	SLIDE ROD CARRIAGE	2	
8		296284382	PLATE - CARRIER MOUNT	1	
9		296284379	PLATE - LEFT CARRIER MOUNT	1	
10		296291805	PLATE - RIGHT CARRIER MOUNT	1	
11		1865017	GROMMET-7/8IDX1.25OD 1/4GROOVE	1	
12		296300789	SCREW-HFS-.50-13X1.25-GR8-YZ	36	
13		296300851	NUT-HEXFLGTL-.50-13-G-YZ	6	
14		296300821	SCREW-HFS-.75-10X3.00-GR8-YZ	2	
15		296293974	RBTB - 1.5" OD X .53" ID - .45	2	
16		296300943	SCREW - SHCS - .50 - 13X4.5 - GR8 - PLN	2	
17	*	296308040	SCRAPER - GEARBOX BEARING	8	
18	*	296300763	SCREW-HFS-.31-18X1.00-GR8-YZ	16	

Rack Carriage (S/N 101-192-) Fig 3-7

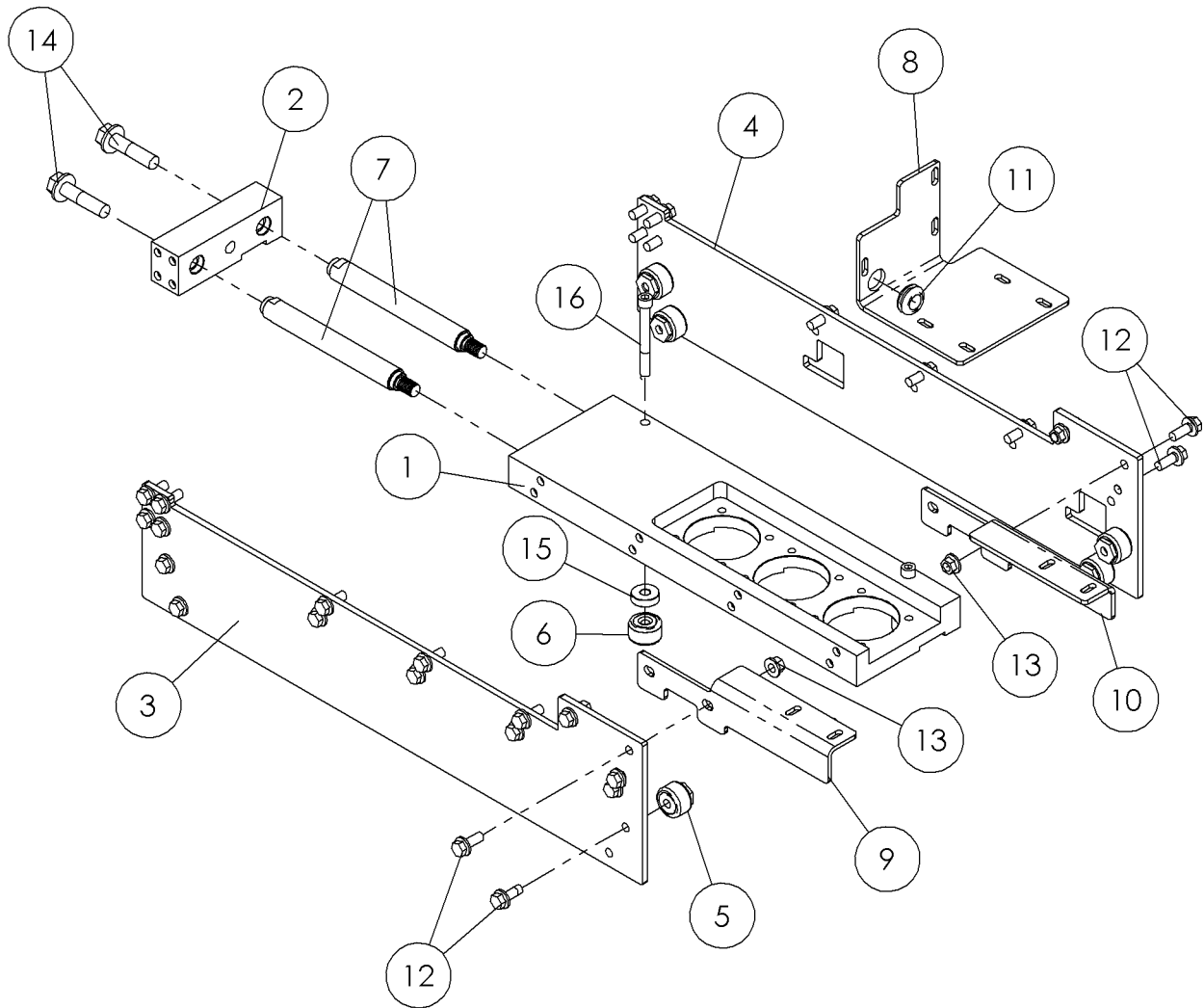


Illustration No. 296284386

## Rack Carriage (S/N 101-192-) Fig 3-7

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Updated Mounts
1		296284375	PLATE - TOP MOTOR MOUNT	1	
2		296284376	SLIDE MOUNT BAR CARRIAGE	1	
3		296284377	PLATE - LEFT CARRIAGE	1	
4		296284378	PLATE - RIGHT CARRIAGE	1	
5		296291810	ROLLER - 1.75 CAM THD	8	
6		296257282	BEARING - 1.75" OD ROLLER	2	
7		296281196	SLIDE ROD CARRIAGE	2	
8		296284382	PLATE - CARRIER MOUNT	1	
9	*	296284379	PLATE - LEFT CARRIER MOUNT	1	
10	*	296291805	PLATE - RIGHT CARRIER MOUNT	1	
11		1865017	GROMMET-7/8IDX1.25OD 1/4GROOVE	1	
12		296300789	SCREW-HFS-.50-13X1.25-GR8-YZ	36	
13		296300851	NUT-HEXFLGTL-.50-13-G-YZ	6	
14		296300821	SCREW-HFS-.75-10X3.00-GR8-YZ	2	
15		296293974	RBTB - 1.5" OD X .53" ID - .45	2	
16		296300943	SCREW - SHCS - .50 - 13X4.5 - GR8 - PLN	2	

Rotation Gearbox Fig 3-8

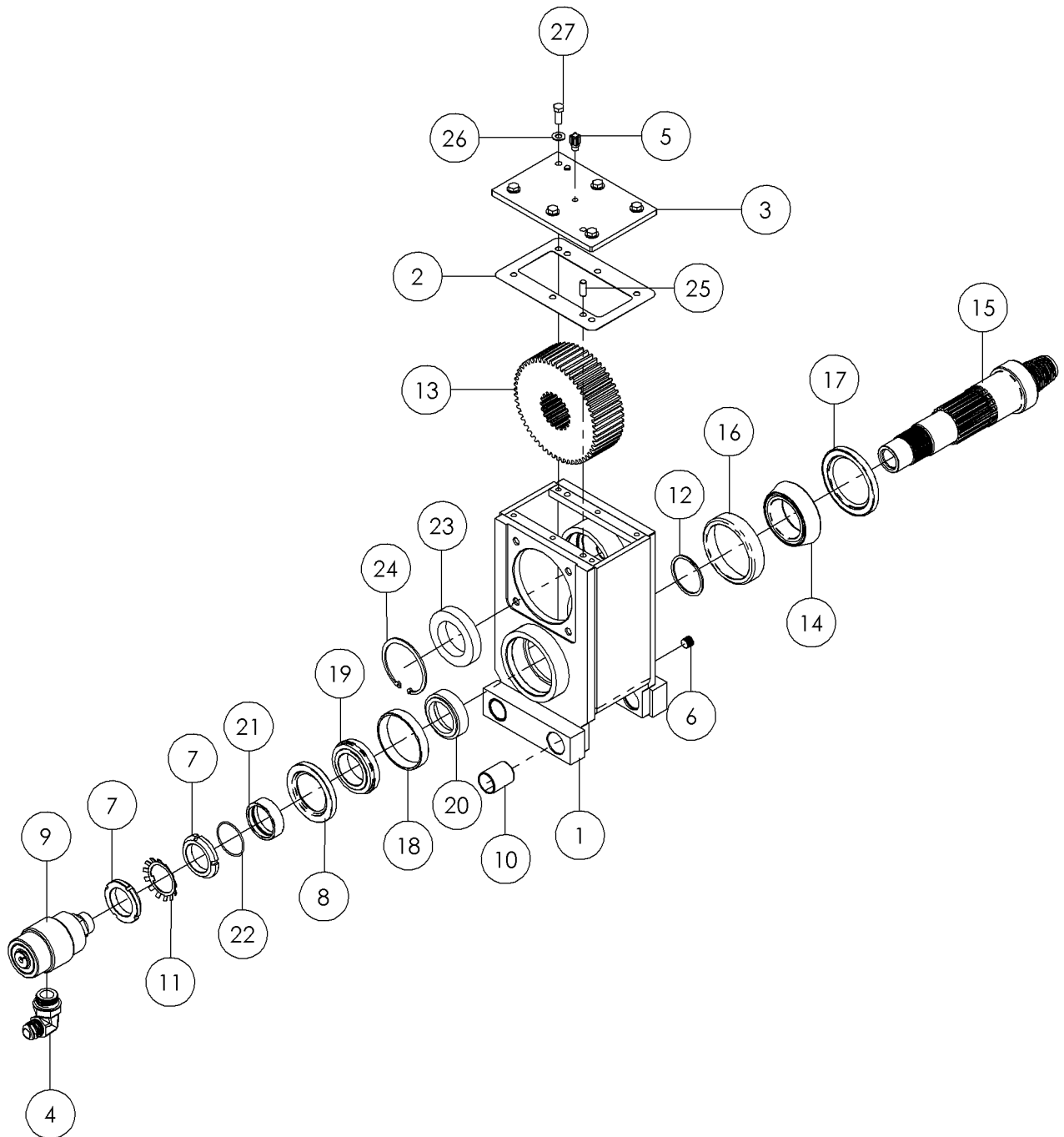


Illustration No. 296310753



## Rotation Gearbox Fig 3-8

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1	*	296303466	ROTATION GEARBOX MACHINED	1	
2		296291795	GASKET-GEARBOX TOP	1	
3		296291784	COVER - GEARBOX TOP	1	
4		78057001	FITTING-90-12MJ-16MORBA	1	
5		599001	BREATHER VENT-1/8 NPT 131000	1	
6		79497001	PLUG-3/8 SOCKET PIPE	2	
7		214200001	LOCKNUT-SLOTTED 2"-18 NF	2	
8		214201001	SEAL-#25100	1	
9		296269258	SWIVEL - 16MORB WATER	1	
10	*	296296030	BUSHING-GREASELESS 1.25X1.75	4	
11		94594007	LOCKWASHER-2.844DIA.OVER TANGS	1	
12		224896250	SNAP RING-2 1/2" EXTERNAL	1	
13	*	296303460	GEAR 55 TOOTH	1	
14		4771061	BRG. CONE 3994	1	
15	*	296303461	SHAFT ROTATION GEARBOX	1	
16		1715013	TIMKEN CUP-2 1/2" #3920	1	
17		240266001	SEAL-4.501ODX3.125IDX.438 WIDE	1	
18		1715001	TIMKEN CUP-2 1/4" #382A	1	
19		1716097	CONE-2 1/8" BRG.	1	
20		235627001	TUBE-GEAR SPACER	1	
21		229433001	SLEEVE-SEAL	1	
22		214202001	O-RING #138	1	
23	*	296282018	BEARING - 6012 RS	1	
24	*	296310755	HO HOUSING RING	1	
25		904484001	PIN-3/8 X 1" DOWEL	2	
26	*	235713001	WASHER-FLATSTRL-.38-.41X.81-.06-YA-A325	6	
27	*	235727001	SCREW-HCS-.38-16X1.00-GR8-YZ	6	

Drive Chuck Fig 3-9

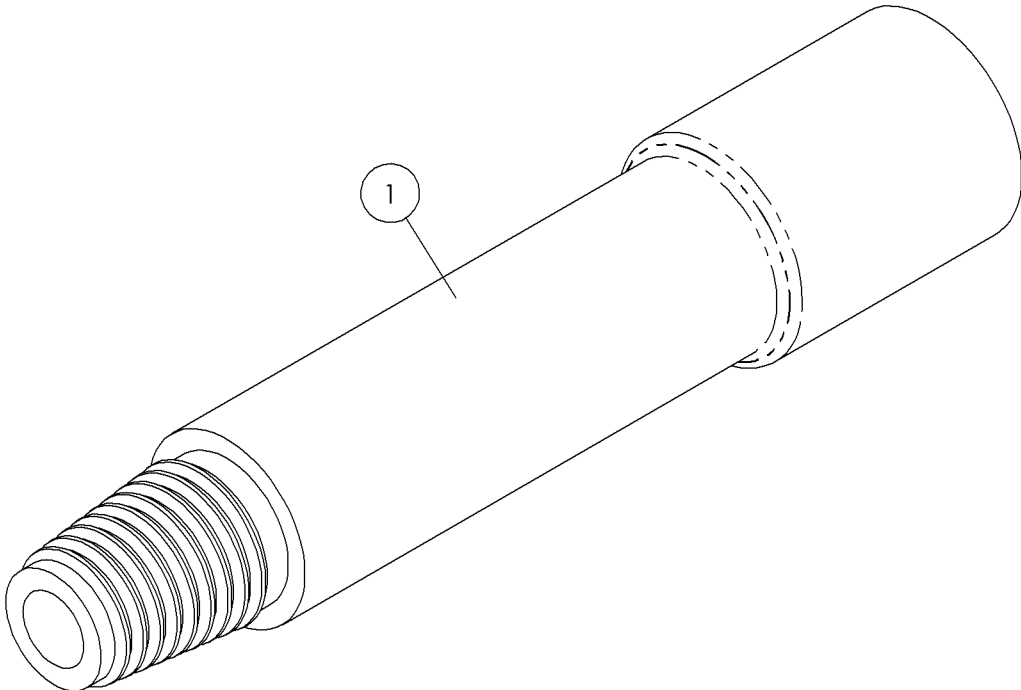
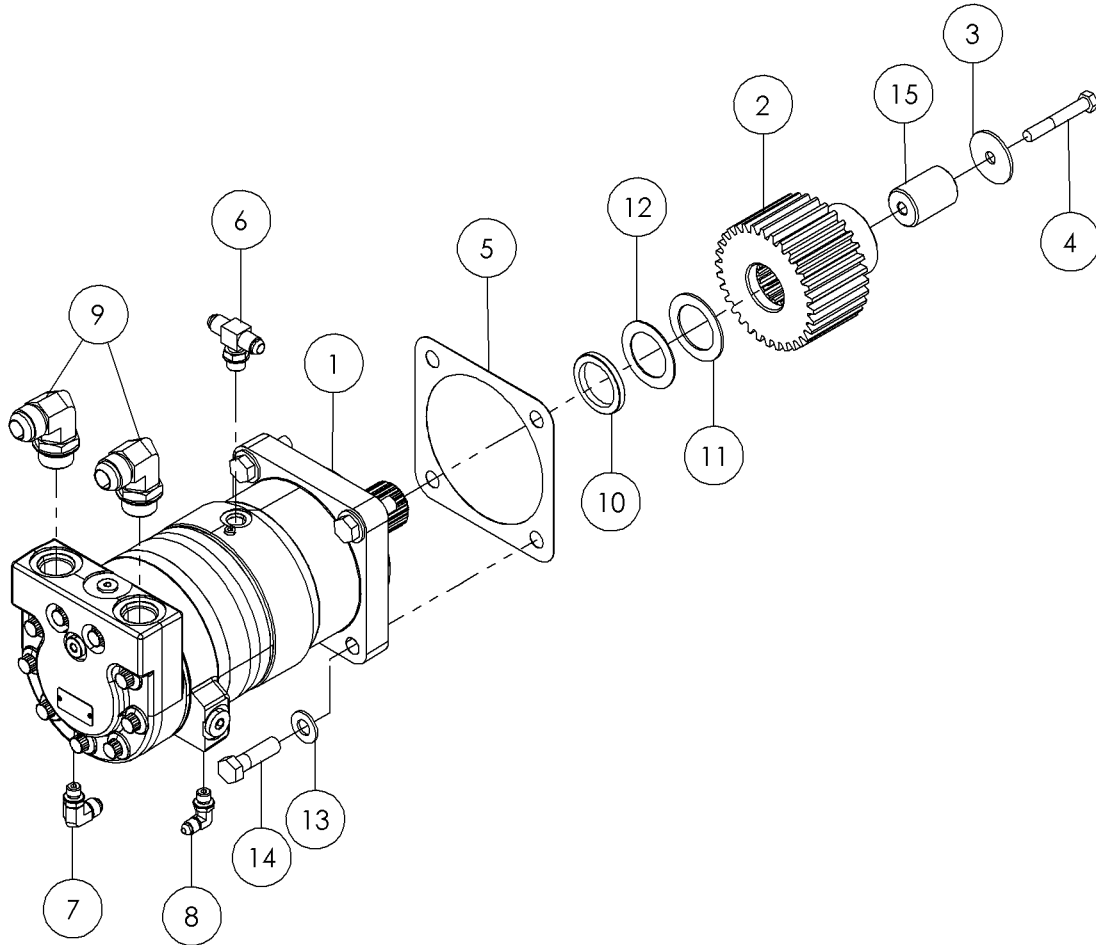


Illustration No. 296281200

Drive Chuck Fig 3-9

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		296281195	SUB SAVER 2.38-2.06	1	

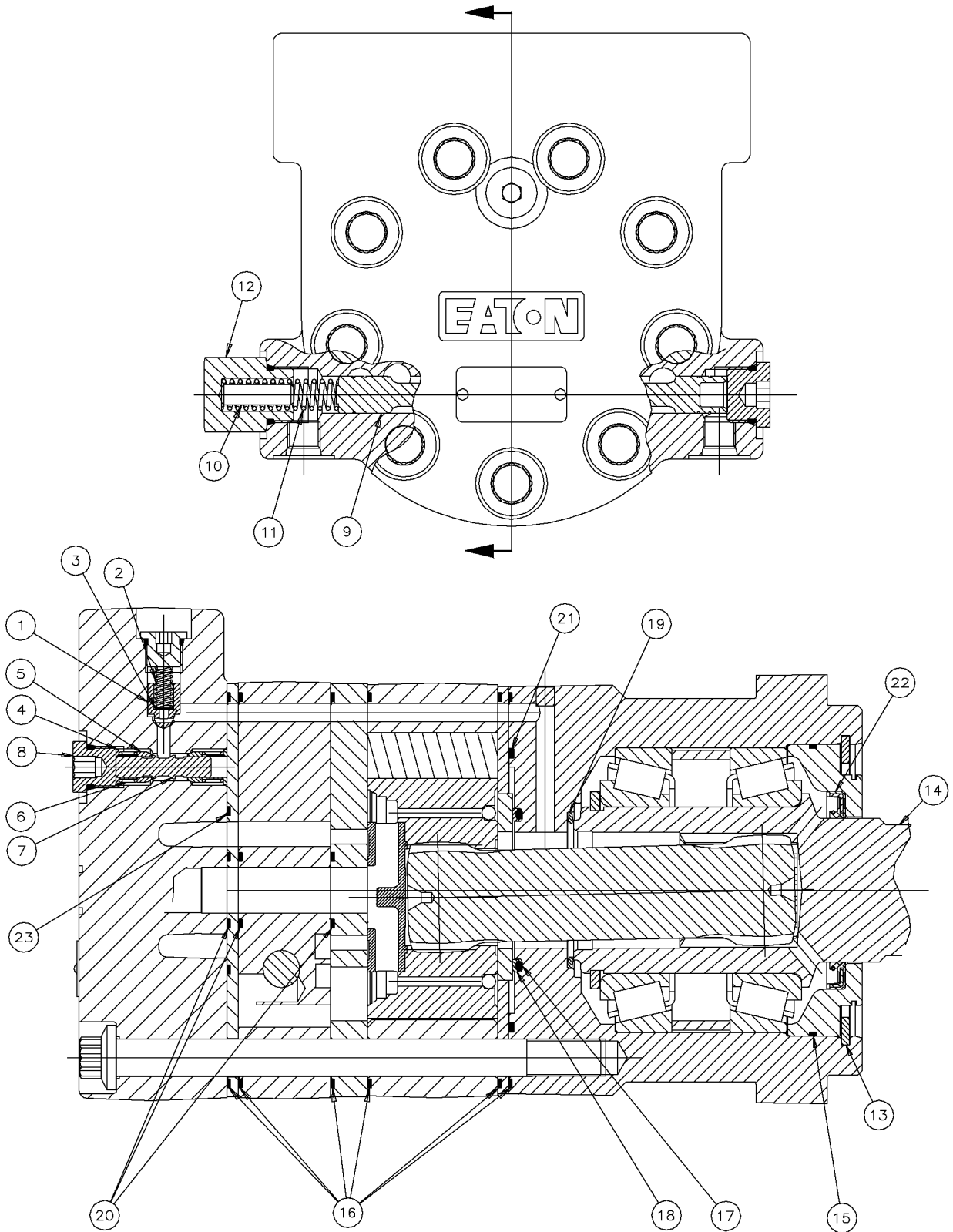
Rotation Motor Fig 3-10



## Rotation Motor Fig 3-10

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1		296275156	MOTOR - 30.7 CU / 2 SPD 17 T SPLINE	1	Breakdown Fig. 3-10a
2	*	296303463	GEAR - TOP ROTATION	1	
3		508899001	WASHER - 1.75 OD X 13/32 ID - .100	1	
4	*	250529001	BOLT 3/8-16X2 1/2"GR.8 HEX	1	
5		217035001	GASKET-.020 4 BOLT	1	
6		68787001	FITTING-6M (BCH)X6M JICX6M JIC	1	
7		60906001	4MX6M JIC 90 DEG ELBOW	1	
8		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	1	
9		59410001	FITTING-90-12MJ-12MORBA	2	
10	*	235663001	TUBE-GEAR SPACER	1	
11	*	483009	WASHER-2 1/4X1 1/2X14 GA M.B.	1	
12	*	4542001	WSHR-2 1/4OD X1 1/2ID-18GA MB	1	
13	*	485025	WASHER-1/2 FLAT-HARDENED-YZ	4	
14	*	240334001	SCREW-HCS-.50-13X1.75-GR8-YZ	4	
15	*	296310765	ROD - GEAR SPACER	1	

Components-Rotation Motor Fig 3-10z01



## Components-Rotation Motor Fig 3-10z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		257547015	POPPET	1	
2		257547011	SHIM	1	
3		257547013	SHIM	A/R	As Required.
4		257547003	SLEEVE,DASH POT	2	
5		257547007	POPPET	2	
6		257547005	SPRING	2	
7		257547009	PISTON,SHUTTLE	1	
8		235642017	PLUG ASSEMBLY	1	
9		296265619	SPOOL - CONTROL	1	
10		296265622	SPRING - COMPRESSION	1	
11		296265624	SPRING	1	
12		296265625	PLUG	1	
13		257547027	RING,RETAINER	1	
14		257547019	SHAFT,SUB-ASSEMBLY	1	Inc. Bearings
15		209137007	SEAL-3 3/4"ID - (O-RING)	1	
16		NSS	SEAL	6	NOT SOLD SEPARATELY
17		NSS	O-RING	1	NOT SOLD SEPARATELY
18		NSS	RING-BACK-UP	1	NOT SOLD SEPARATELY
19		NSS	SEAL,SHAFT FACE	1	NOT SOLD SEPARATELY
20		NSS	O-RING	3	NOT SOLD SEPARATELY
21		NSS	O-RING	1	NOT SOLD SEPARATELY
22		NSS	SEAL,SHAFT	1	NOT SOLD SEPARATELY
23		NSS	O-RING	1	NOT SOLD SEPARATELY
		296265628	SEAL KIT		Inc. Ref. 16-23
		296275156	MOTOR - 30.7 CU / 2 SPD 17 T SPLINE		Inc All Items In Figure.

Thrust/Pullback Motor (S/N 147-) Fig 3-11r01

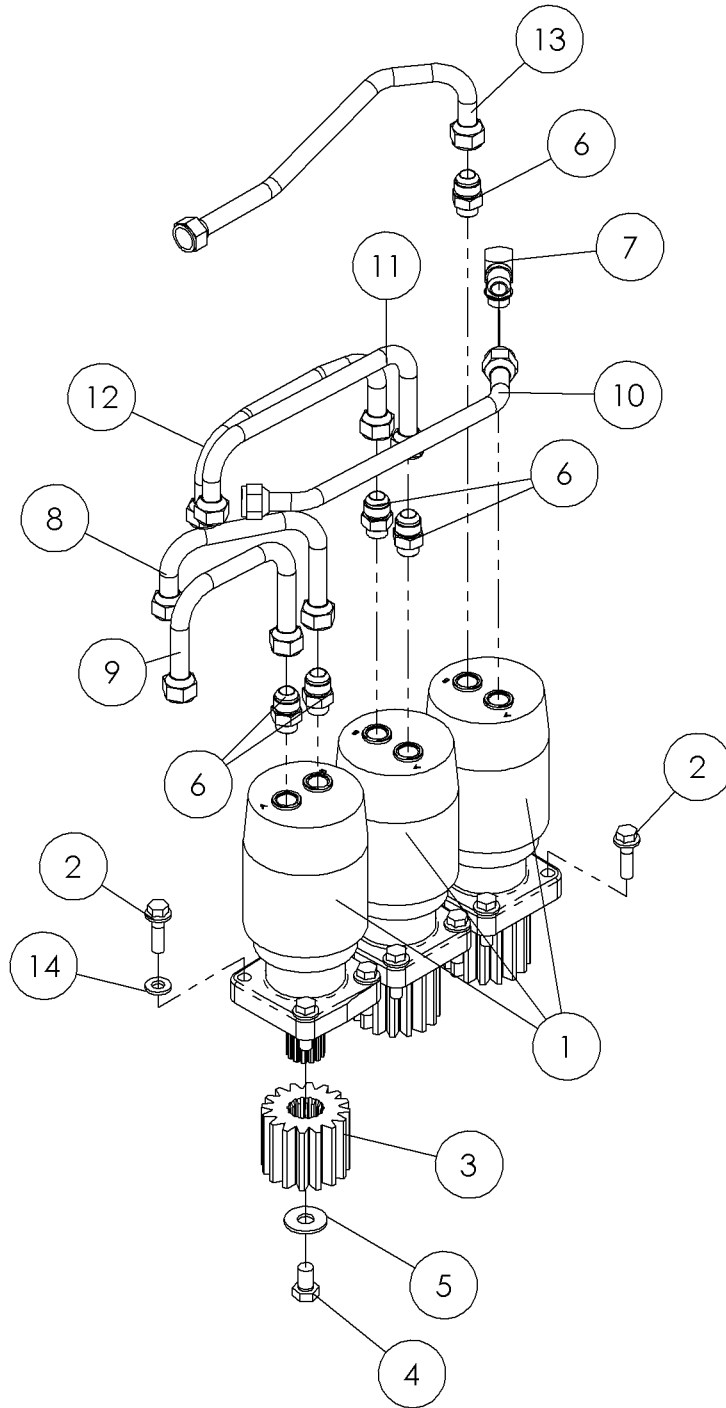


Illustration No. 296281199



## Thrust/Pullback Motor (S/N 147-) Fig 3-11r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Change tubes
1		296257255	MOTOR - 20.6 CU. IN. HYD.	3	Breakdown Fig. 3-11a
2		296300791	SCREW-HFS-.50-13X1.75-GR8-YZ	12	
3		282876001	GEAR - 16 T 5DP PINION	3	
4		296257353	SCREW - HCS-.63-18X1-GR8-YZ	3	
5		485015	WASHER-5/8 FLAT	3	
6		60910001	10MX12M JIC ST.ADAPTER	5	
7		53871001	#10M O-RING X 12M JIC 90	1	
8	*	296306304	TUBE - .75 X 1.09W	1	(SN 147- )
9	*	296306305	TUBE -.75 X 1.09W	1	(SN 147- )
10	*	296306306	TUBE -.75 X 1.09W	1	(SN 147- )
11	*	296306307	TUBE -.75 X 1.09W	1	(SN 147- )
12	*	296306308	TUBE -.75 X 1.09W	1	(SN 147- )
13	*	296306309	TUBE -.75 X 1.09W	1	(SN 147- )
14		127362001	WASHER-1/2 HARD.FLAT/PLATED	6	

Thrust/Pullback Motor (S/N 101-146) Fig 3-11

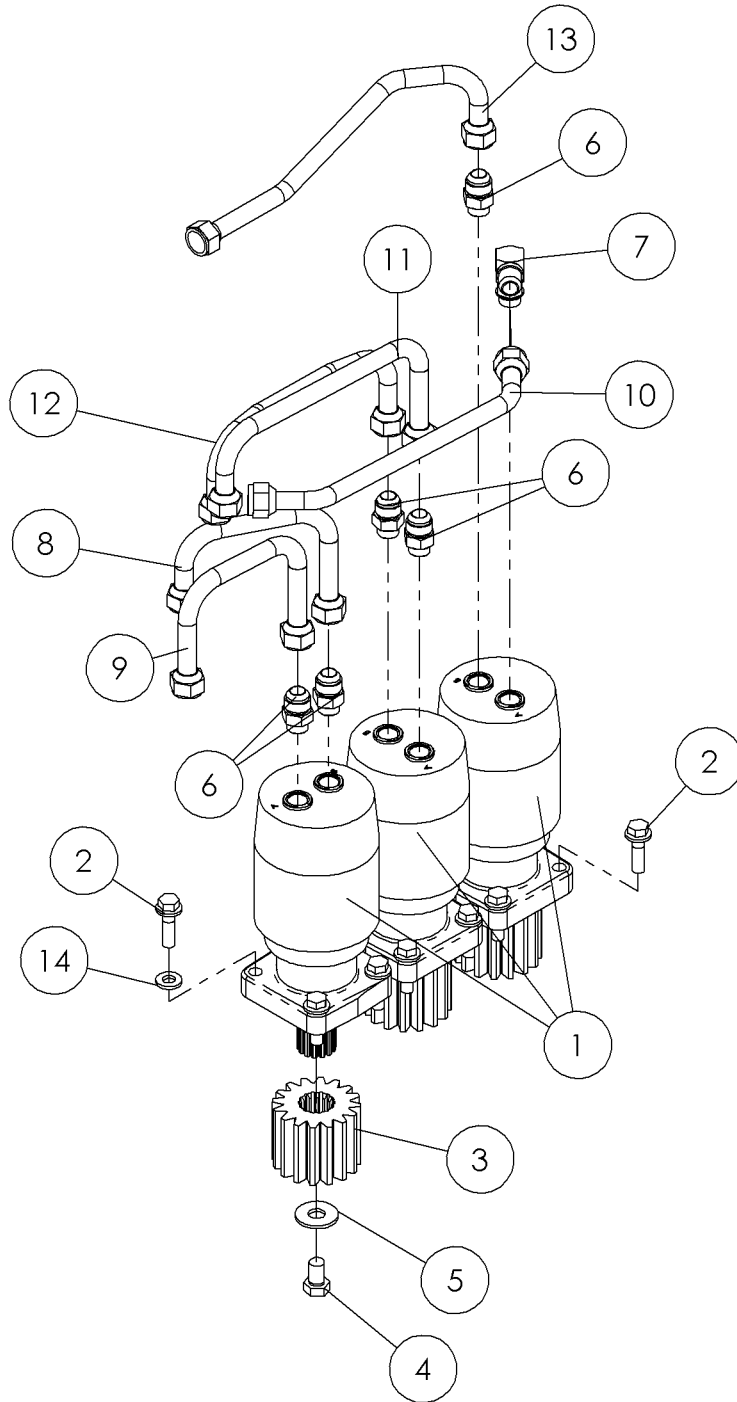
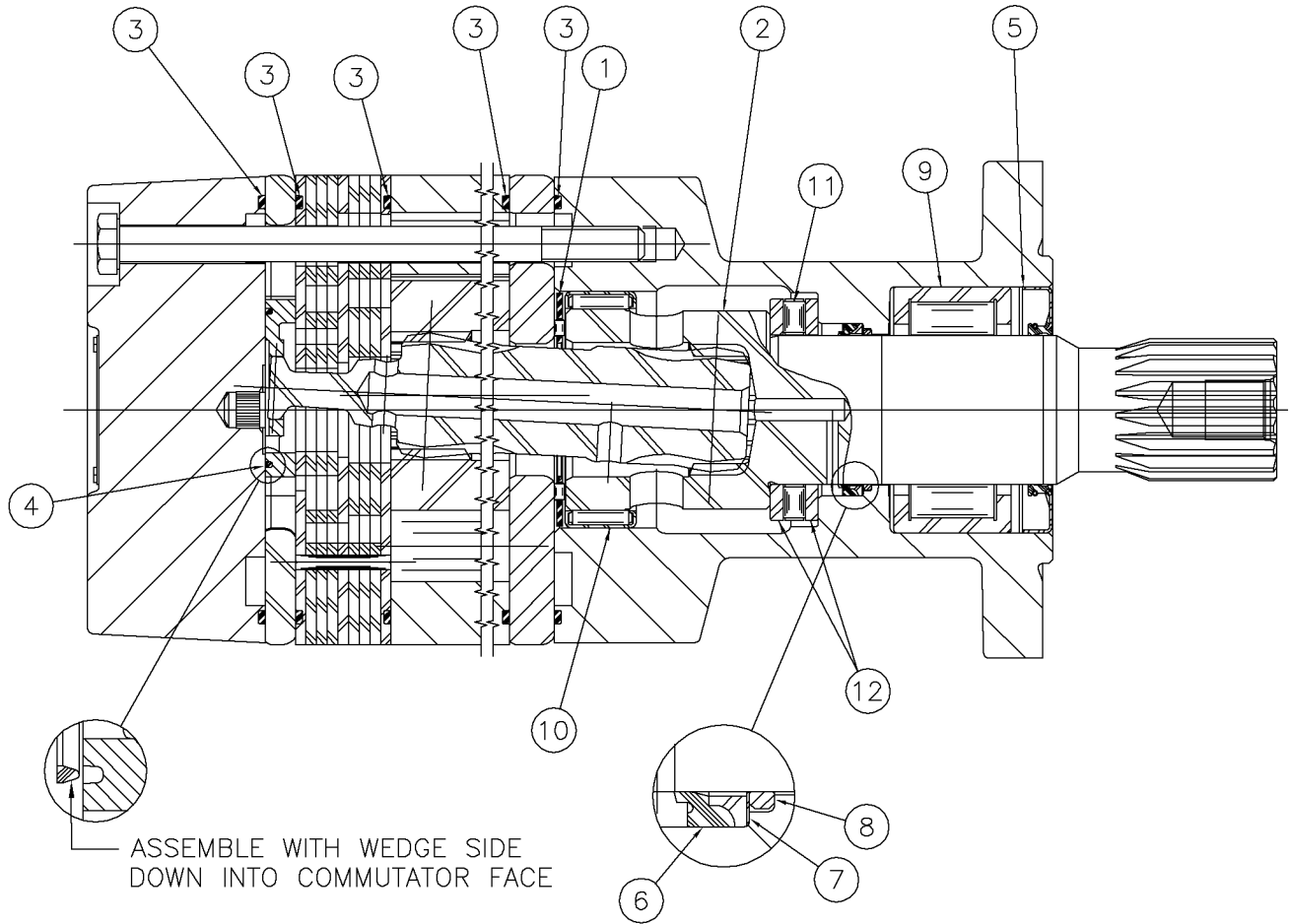


Illustration No. 296281199

## Thrust/Pullback Motor (S/N 101-146) Fig 3-11

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296257255	MOTOR - 20.6 CU. IN. HYD.	3	Breakdown Fig. 3-11a
2		296300791	SCREW-HFS-.50-13X1.75-GR8-YZ	12	
3		282876001	GEAR - 16 T 5DP PINION	3	
4		296257353	SCREW - HCS-.63-18X1-GR8-YZ	3	
5		485015	WASHER-5/8 FLAT	3	
6		60910001	10MX12M JIC ST.ADAPTER	5	
7		53871001	#10M O-RING X 12M JIC 90	1	
8		296293771	TUBE - .75 X 1.09W	1	
9		296293772	TUBE - .75 X 1.09W	1	
10		296293773	TUBE -.75 X 1.09W	1	
11		296293774	TUBE - .75 X 1.09W	1	
12		296293775	TUBE - .75 X 1.09W	1	
13		296293776	TUBE - .75 X 1.09W	1	
14		127362001	WASHER-1/2 HARD.FLAT/PLATED	6	

Components-Thrust/Pullback Motor Fig 3-11z01



## Components-Thrust/Pullback Motor Fig 3-11z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		88759021	BEARING-THRUST	1	
2		296265564	SHAFT - COUPLING	1	
3		NSS	SEAL RING	5	Not Sold Separately
4		NSS	SEAL-COMMUTATOR	1	Not Sold Separately
5		NSS	SEAL-D&W	1	Not Sold Separately
6		NSS	SEAL-SHAFT	1	Not Sold Separately
7		NSS	WASHER-BACKUP	1	Not Sold Separately
8		NSS	RING-BACKUP	1	Not Sold Separately
9		296265639	BEARING - FRONT RADIAL	1	
10		296265640	BEARING - REAR RADIAL	1	
11		296265641	BEARING - THRUST	1	
12		296265642	WASHER - THRUST	2	
		296265578	REPAIR KIT		Inc Ref. 3-8
		296257255	MOTOR - 20.6 CU. IN. HYD.		Inc. All Items In Figure.

Thrust/Pullback Valve Fig 3-12

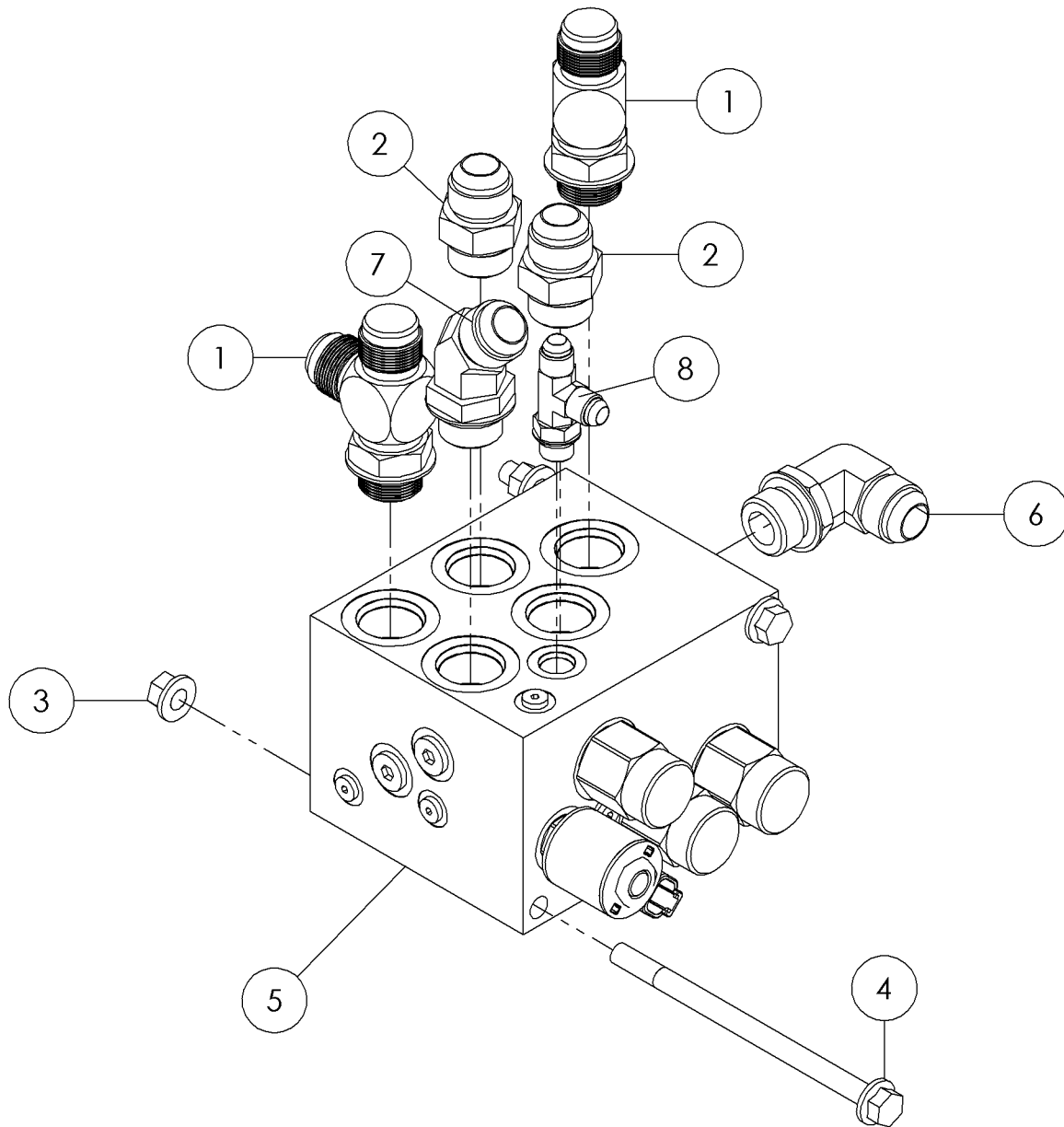
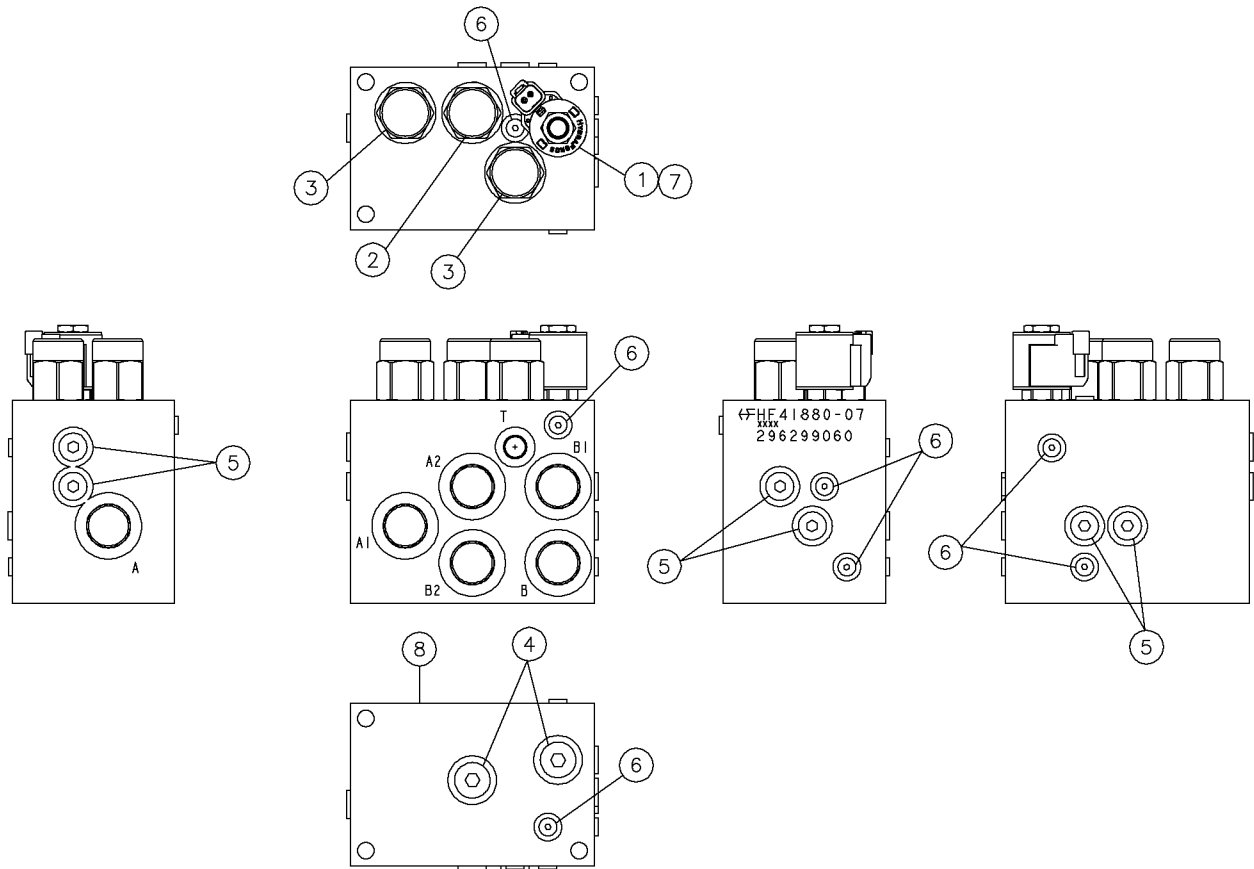


Illustration No. 296281198

## Thrust/Pullback Valve Fig 3-12

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration.
1		59420001	12 JICX12M ADJ. STR THRD RUN TEE	2	
2		53828001	#12M O-RING-#12M JIC ST.	2	
3		296300850	NUT-HEXFLGTL-.38-16-G-YZ	3	
4		296300911	SCREW-HFS-.38-16X6.00-GR8-YZ	3	
5		296299060	VALVE - THRUST/PULLBACK 2 SPEED	1	Breakdown Fig. 3-12a
6		59410001	FITTING-90-12MJ-12MORBA	1	
7		60718001	FITTING-45-12MJ-12MORBA	1	
8		68774001	FITTING-6MX6M JIC (RUN)X6M JIC	1	

Components-Thrust/Pullback Valve Fig 3-12z01



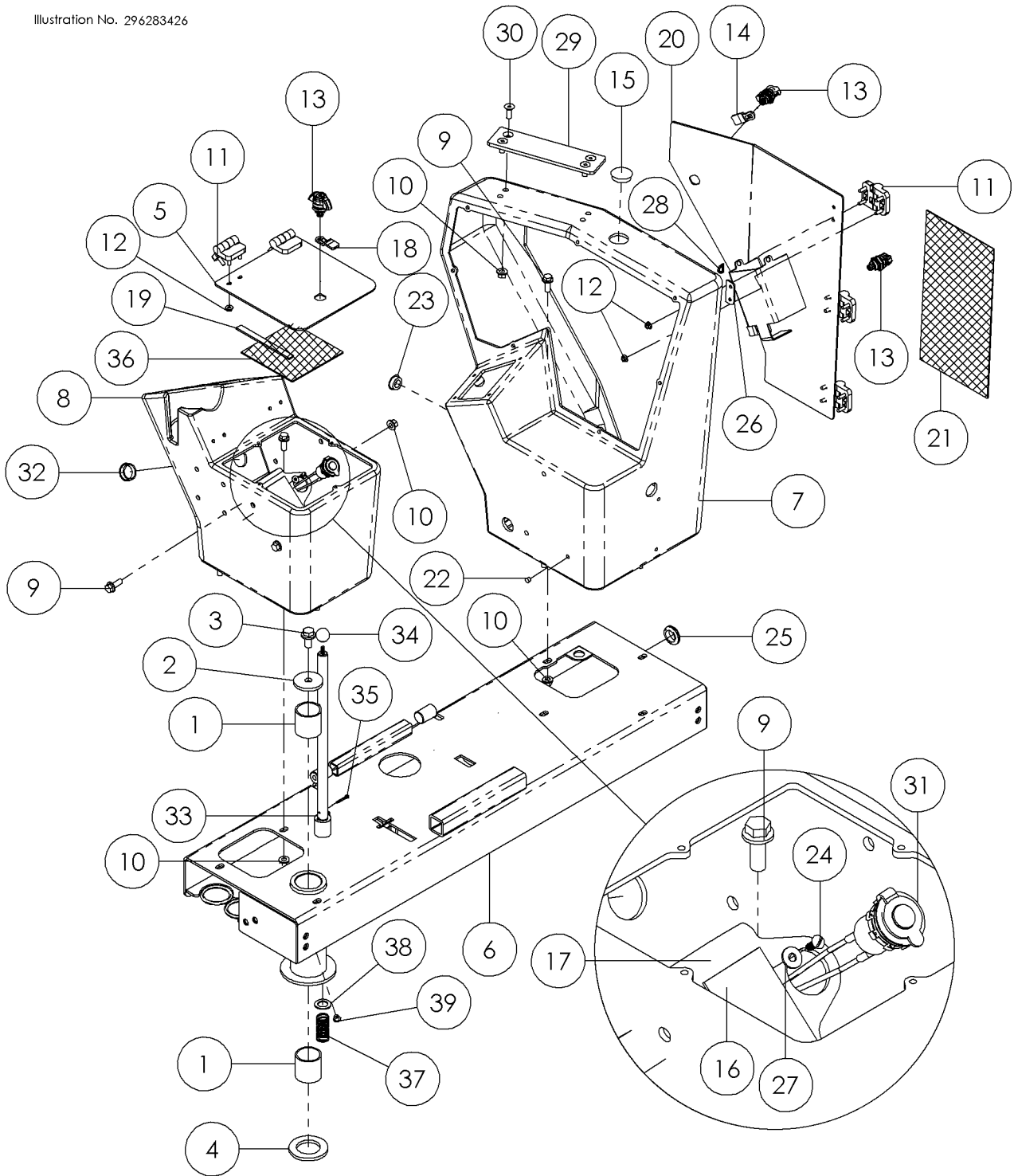


Components-Thrust/Pullback Valve Fig 3-12z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296251079	VALVE - SOLENOID 3-WAY	1	
		296251057	SEAL KIT	1	
2		296302391	PILOTED 2-WAY SPOOL	1	
		279112001	SEAL KIT	1	
3		296302392	PILOTED 2-WAY SPOOL	1	
		279112001	SEAL KIT	2	
4		236494005	PLUG-SAE	2	
5		500659021	SAE PLUG	6	
6		240324015	PLUG-SAE	7	
7		296271115	COIL	1	
8		NSS	BLOCK	1	Not Sold Separately
		296299060	VALVE - THRUST/PULLBACK 2 SPEED		Inc. All Items In Figure

Console (S/N 202-) Fig 3-13r03

Illustration No. 296283426



## Console (S/N 202-) Fig 3-13r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		70070005	BEARING-COMPOSITE 2 LONG	2	
2		510359621	WASHER-FLATWRT-.50-.53X2.25-.25-YZ	1	
3		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	1	
4		296260403	SPACER - SEAT SWIVEL	1	
5		296283478	PLATE - LH CONSOLE DOOR	1	
6		296283396	SUBWELD - SEAT/CONSOLE PLATFORM	1	
7		296294068	CONSOLE - OPERATOR RH	1	
8		296294069	CONSOLE - OPERATOR LH	1	
9		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	9	
10		296300850	NUT-HEXFLGTL-.38-16-G-YZ	13	
11		296294227	HINGE-TAMPER PROOF BUTT	5	
12		507085006	NUT-HEXFLNG LOCK,M6-1.00,10.9,YZ,D6927	20	
13		163642892	CAM-LATCH LOCKABLE WING KNOB	3	
14		296306078	CAM - LOCK 14MM	2	
15		296294052	PLUG-HOLE 1.50	1	
16		7000D463	DECAL-RELAY/FUSE PANEL	1	
17		296306010	WELDMENT - FUSE/RELAY MOUNT	1	
18		296306077	CAM - LOCK 12MM	1	
19		282764001	WEATHER STRIP	1	
20		296294160	DOOR WELDMENT - RH CONSOLE	1	
21		7000D563	DECAL - DANGER 4 PANEL	1	Domestic
21		700ID563	DECAL - DANGER, 4-PANEL	1	International
22		148941001	PLUG - HOLE 5/16" BLACK NYLON	3	
23		97389001	PLUG-1" BLACK DOME	1	
24		1802004	BOLT-3/16"NF X 1/2" STOVE	4	
25		277362001	GROMMET 1.5"OD X 1" ID	1	
26		296306042	PLATE - RH DOOR SPACER	3	
27		485001	WASHER - FLATSTD - .19 - .22 X .56 - .05 - CZ	4	
28		293713001	SEAL-3/4 X 9/16 ADH. BACKED RUBBER	1	
29		296306047	PLATE - LOCATOR	1	
30		95988010	SCREW-SFHCS-.38-16X1.00-GR8-PLN	4	
31		154677001	OUTLET - 12 VOLT	1	
32		97389003	PLUG-1 1/4" BLACK DOME	1	
33		296306091	ROD - SEAT PIVOT	1	
34		296292050	KNOB- 1" ROUND	1	
35		510009	COTTER PIN-1/8" X 1"	2	
36		700ID619	DECAL - GREASE CHART	1	
37		1803023	SPRING - COMP. #67 2" OA	1	
38		483025	WASHER-1 1/4X3/4X14 GA M.B.	2	
39		296327002	PLUG-1/8 NPT POLY PULL	1	

Console (S/N 166-201) Fig 3-13r02

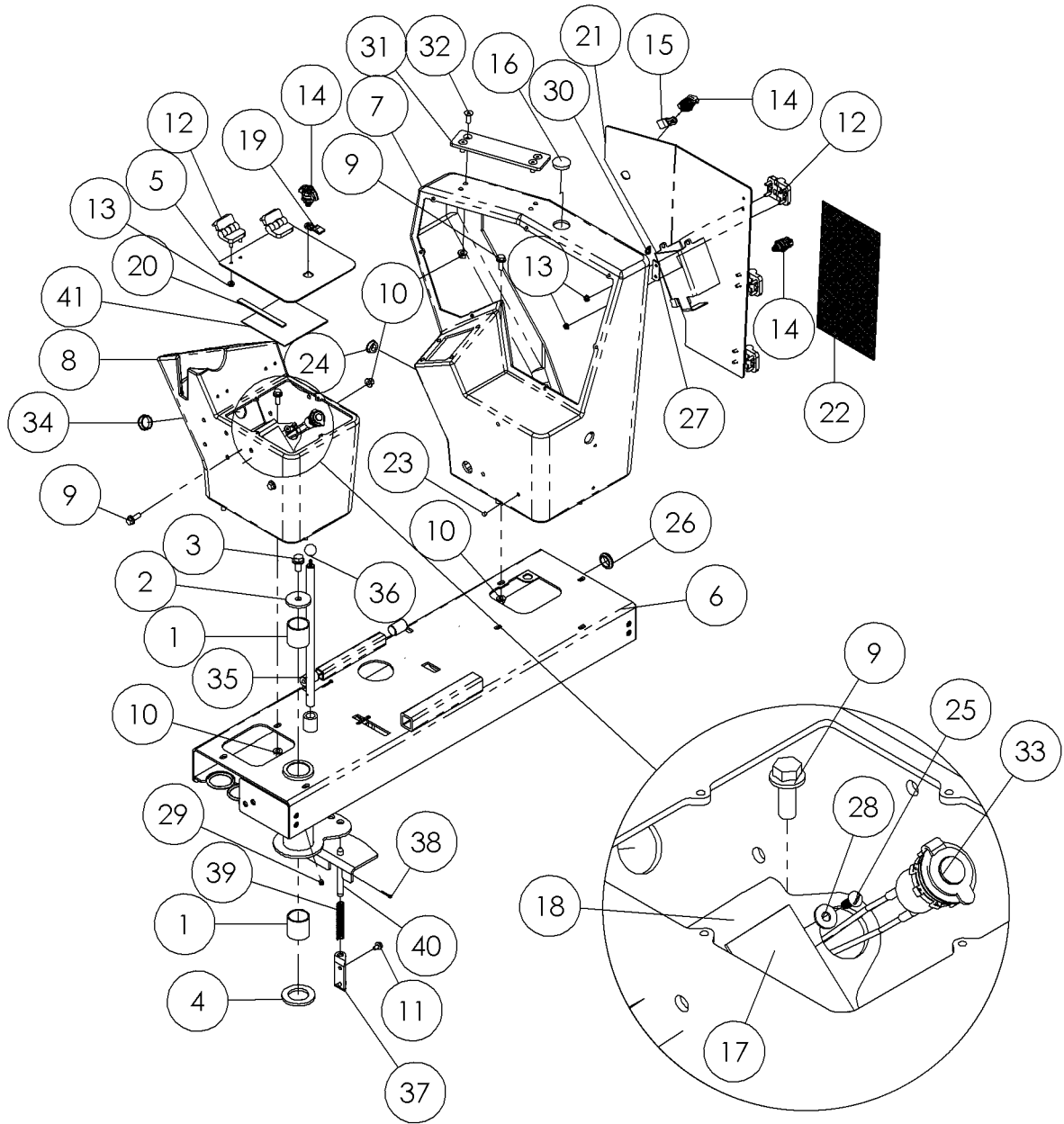


Illustration No. 296283426

## Console (S/N 166-201) Fig 3-13r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Corrected Serial Number
1		70070005	BEARING-COMPOSITE 2 LONG	2	
2		510359621	WASHER-FLATWRT-.50-.53X2.25-.25-YZ	1	
3		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	1	
4		296260403	SPACER - SEAT SWIVEL	1	
5		296283478	PLATE - LH CONSOLE DOOR	1	
6		296283396	SUBWELD - SEAT/CONSOLE PLATFORM	1	
7		296294068	CONSOLE - OPERATOR RH	1	
8		296294069	CONSOLE - OPERATOR LH	1	
9		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	9	
10		296300850	NUT-HEXFLGTL-.38-16-G-YZ	13	
11		296300859	SCREW-HFS-.31-18X.50-GR8-YZ	2	
12		296294227	HINGE-TAMPER PROOF BUTT	5	
13		507085006	NUT-HEXFLNG LOCK,M6-1.00,10.9,YZ,D6927	20	
14		163642892	CAM-LATCH LOCKABLE WING KNOB	3	
15		296306078	CAM - LOCK 14MM	2	
16		296294052	PLUG-HOLE 1.50	1	
17		7000D463	DECAL-RELAY/FUSE PANEL	1	Domestic/International
18		296306010	WELDMENT - FUSE/RELAY MOUNT	1	
19		296306077	CAM - LOCK 12MM	1	
20		282764001	WEATHER STRIP	1	
21		296294160	DOOR WELDMENT - RH CONSOLE	1	
22		7000D563	DECAL - DANGER 4 PANEL	1	Domestic
	*	700ID563	DECAL- DANGER 4 PANEL		International
23		148941001	PLUG - HOLE 5/16" BLACK NYLON	3	
24		97389001	PLUG-1" BLACK DOME	1	
25		1802004	BOLT-3/16"NF X 1/2" STOVE	4	
26		277362001	GROMMET 1.5"OD X 1" ID	1	
27		296306042	PLATE - RH DOOR SPACER	3	
28		485001	WASHER-FLATSTD-.19-.22X.56-.05-CZ	4	
29		115222001	FITTING-1/8 NPT HEX SOCKET	1	
30		293713001	SEAL-3/4 X 9/16 ADH. BACKED RUBBER	1	
31		296306047	PLATE - LOCATOR	1	
32		95988010	SCREW-SFHCS-.38-16X1.00-GR8-PLN	4	
33		154677001	OUTLET - 12 VOLT	1	
34		97389003	PLUG-1 1/4" BLACK DOME	1	
35	*	296306091	ROD - SEAT PIVOT	1	(SN 166-)
36	*	296292050	KNOB- 1" ROUND	1	(SN 166-)
37	*	296306092	PLATE - SPRING LATCH BASE	1	(SN 166-)
38	*	510009	COTTER PIN-1/8" X 1"	2	(SN 166-)
39	*	1803125	SPRING-COMP .067WIRE 0.5313ID 7.5LB/IN	1	(SN 166-)
40	*	296306082	WELDMENT - SEAT PIVOT FOOT LOCK	1	(SN 166-)
41	*	700ID619	DECAL - GREASE CHART	1	(SN 166-) Domestic/International

Console (S/N 101-165) Fig 3-13r01

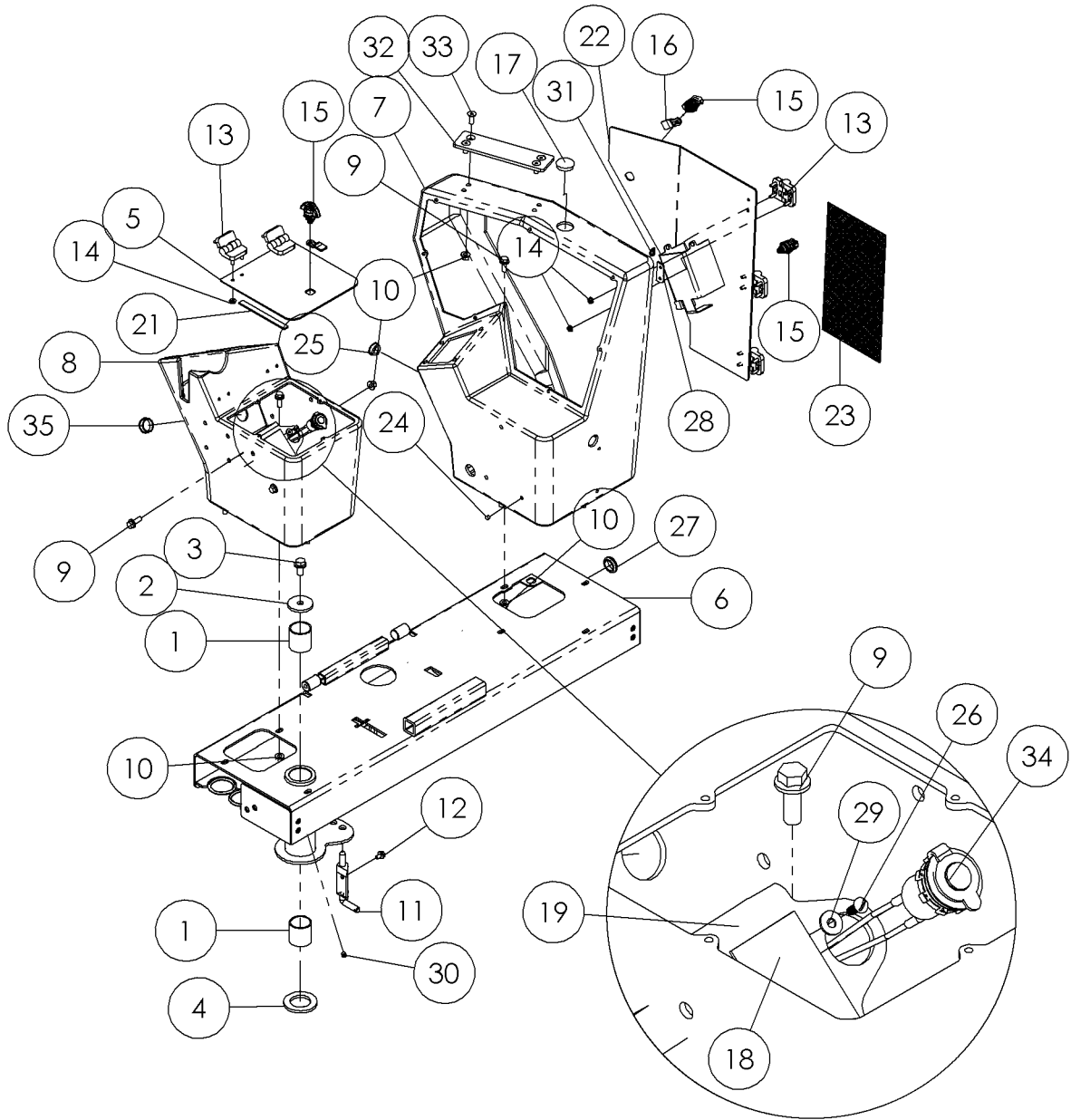


Illustration No. 296283426

## Console (S/N 101-165) Fig 3-13r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Update In Illustration.
1		70070005	BEARING-COMPOSITE 2 LONG	2	
2		510359621	WASHER-FLATWRT-.50-.53X2.25-.25-YZ	1	
3		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	1	
4		296260403	SPACER - SEAT SWIVEL	1	
5		296283478	PLATE - LH CONSOLE DOOR	1	
6		296283396	SUBWELD - SEAT/CONSOLE PLATFORM	1	
7		296294068	CONSOLE - OPERATOR RH	1	
8		296294069	CONSOLE - OPERATOR LH	1	
9		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	9	
10		296300850	NUT-HEXFLGTL-.38-16-G-YZ	13	
11		296274337	SPRING LATCH 720-S-L-ZINC	1	
12		296300859	SCREW-HFS-.31-18X.50-GR8-YZ	2	
13		296294227	HINGE-TAMPER PROOF BUTT	5	
14		507085006	NUT-HEXFLNG LOCK,M6-1.00,10.9,YZ,D6927	20	
15		163642892	CAM-LATCH LOCKABLE WING KNOB	3	
16		296306078	CAM - LOCK 14MM	2	
17		296294052	PLUG-HOLE 1.50	1	
18		7000D463	DECAL-RELAY/FUSE PANEL	1	Domestic/International
19		296306010	WELDMENT - FUSE/RELAY MOUNT	1	
20		296306077	CAM - LOCK 12MM	1	
21		282764001	WEATHER STRIP	1	
22		296294160	DOOR WELDMENT - RH CONSOLE	1	
23		7000D563	DECAL - DANGER 4 PANEL	1	Domestic/International
24		148941001	PLUG - HOLE 5/16" BLACK NYLON	3	
25		97389001	PLUG-1" BLACK DOME	1	
26		1802004	BOLT-3/16"NF X 1/2" STOVE	4	
27		277362001	GROMMET 1.5"OD X 1" ID	1	
28		296306042	PLATE - RH DOOR SPACER	3	
29		485001	WASHER - FLATSTD - .19 - .22 X .56 - .05 - CZ	4	
30		115222001	FITTING-1/8 NPT HEX SOCKET	1	
31		293713001	SEAL-3/4 X 9/16 ADH. BACKED RUBBER	1	
32		296306047	PLATE - LOCATOR	1	
33		95988010	SCREW-SFHCS-.38-16X1.00-GR8-PLN	4	
34		154677001	OUTLET - 12 VOLT	1	
35		97389003	PLUG-1 1/4" BLACK DOME	1	

Console Fig 3-13

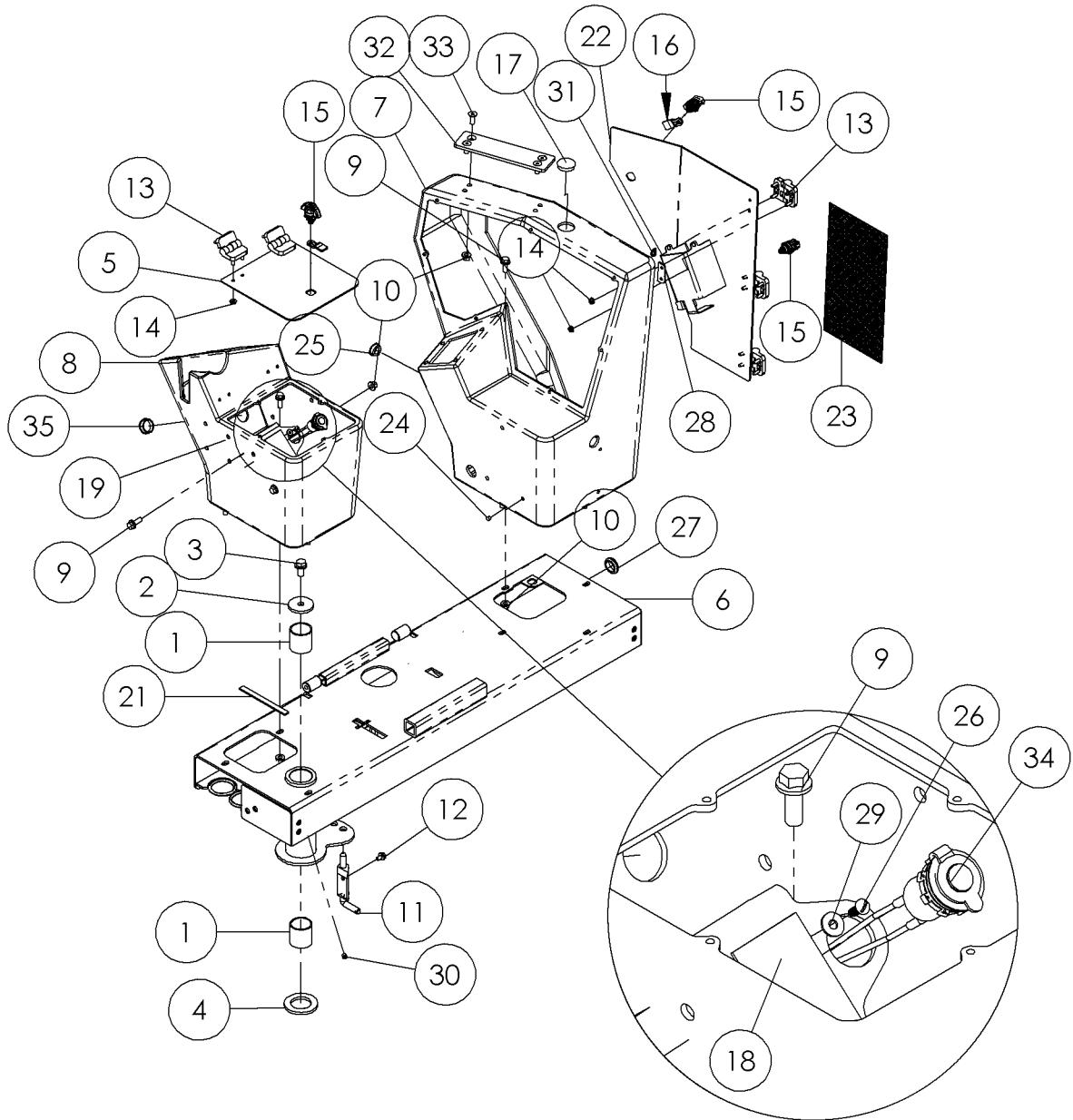


Illustration No. 296283426



Console Fig 3-13

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1		70070005	BEARING-COMPOSITE 2 LONG	2	
2		510359621	WASHER-FLATWRT-.50-.53X2.25-.25-YZ	1	
3		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	1	
4		296260403	SPACER - SEAT SWIVEL	1	
5		296283478	PLATE - LH CONSOLE DOOR	1	
6		296283396	SUBWELD - SEAT/CONSOLE PLATFORM	1	
7		296294068	CONSOLE - OPERATOR RH	1	
8		296294069	CONSOLE - OPERATOR LH	1	
9		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	9	
10		296300850	NUT-HEXFLGTL-.38-16-G-YZ	13	
11		296274337	SPRING LATCH 720-S-L-ZINC	1	
12		296300859	SCREW-HFS-.31-18X.50-GR8-YZ	2	
13		296294227	HINGE-TAMPER PROOF BUTT	5	
14		507085006	NUT-HEXFLNG LOCK,M6-1.00,10.9,YZ,D6927	20	
15		163642892	CAM-LATCH LOCKABLE WING KNOB	3	
16		296306078	CAM - LOCK 14MM	2	
17		296294052	PLUG-HOLE 1.50	1	
18		7000D463	DECAL-RELAY/FUSE PANEL	1	Domestic/International
19		296306010	WELDMENT - FUSE/RELAY MOUNT	1	
20		296306077	CAM - LOCK 12MM	1	
21		282764001	WEATHER STRIP	1	
22		296294160	DOOR WELDMENT - RH CONSOLE	1	
23		7000D563	DECAL - DANGER 4 PANEL	1	Domestic/International
24		148941001	PLUG - HOLE 5/16" BLACK NYLON	3	
25		97389001	PLUG-1" BLACK DOME	1	
26		1802004	BOLT-3/16"NF X 1/2" STOVE REF T16183	4	
27		277362001	GROMMET 1.5"OD X 1" ID	1	
28		296306042	PLATE - RH DOOR SPACER	3	
29		485001	WASHER - FLATSTD - .19 - .22 X .56 - .05 - CZ	4	
30		115222001	FITTING-1/8 NPT HEX SOCKET	1	
31		293713001	SEAL-3/4 X 9/16 ADH. BACKED RUBBER	1	
32		296306047	PLATE - LOCATOR	1	
33		95988010	SCREW-SFHCS-.38-16X1.00-GR8-PLN	4	
34		154677001	OUTLET - 12 VOLT	1	
35		97389003	PLUG-1 1/4" BLACK DOME	1	

Seat Fig 3-14

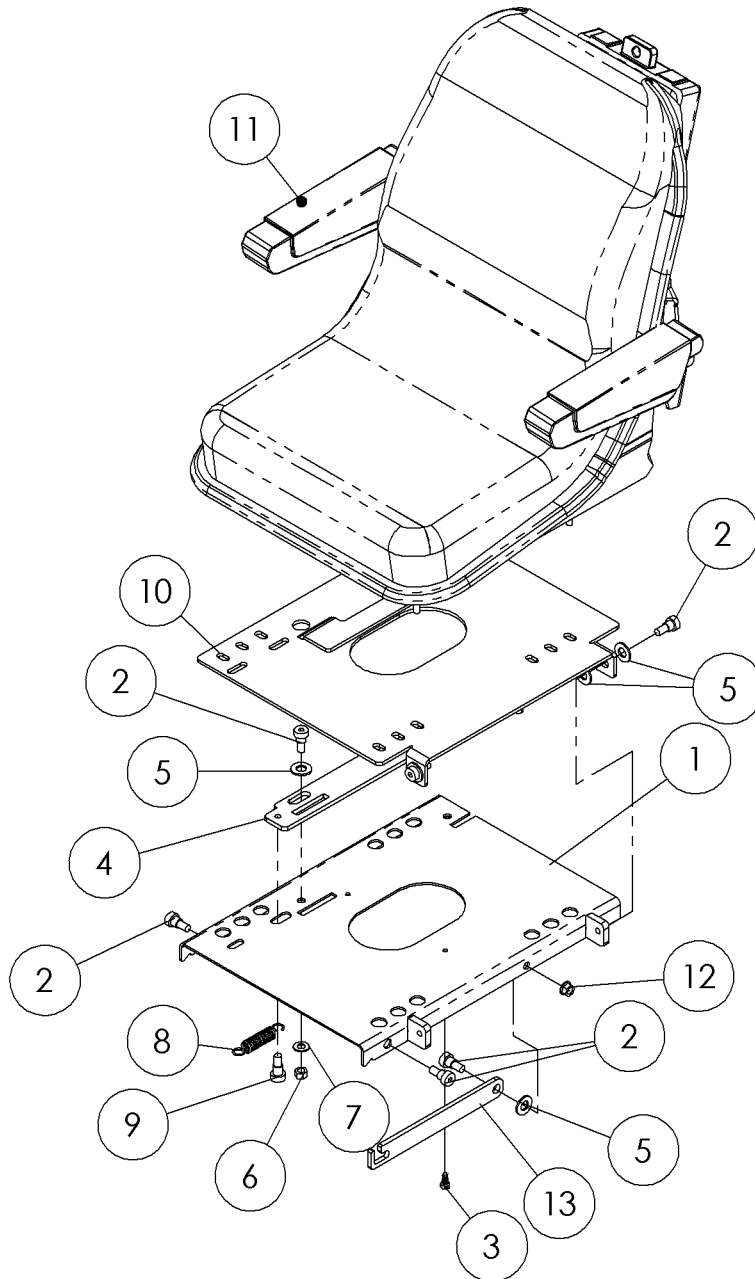


Illustration No. 296306043

Seat Fig 3-14

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Change Qty Of Washer
1		296306045	SEAT TILT BASE	1	
2		296256038	SCREW - SHSS - .50X.38-.38-16 THD-CZ	8	
3		278953001	ANCHOR - CABLE TIE	1	
4		296281118	PLATE - SEAT LATCH	1	
5	*	252253001	WASHER-1/2 SAE FLAT ZP	7	
6		250508001	NUT - 3/8-NC Gr8 TOP LOCK Y/ZINC	3	
7		235713001	WASHER - FLATSTRL - .38 - .41 X .81 - .06-YA-A325	3	
8		235869001	SPRING-EXT. 3/4 OD X .085-3.00	1	
9		240056001	SCREW-SHSS-.50X.50-.38-16THD-CZ	1	
10		296281131	SEAT TILT WELDMENT	1	
11		296306044	SEAT ASSEMBLY	1	Breakdown Fig. 3-14a
12		296300895	NUT-HEXFLG-.38-16-GR8-YZ	1	
13		296294184	PLATE - PROP ROD	1	

Components-Seat Fig 3-14z01

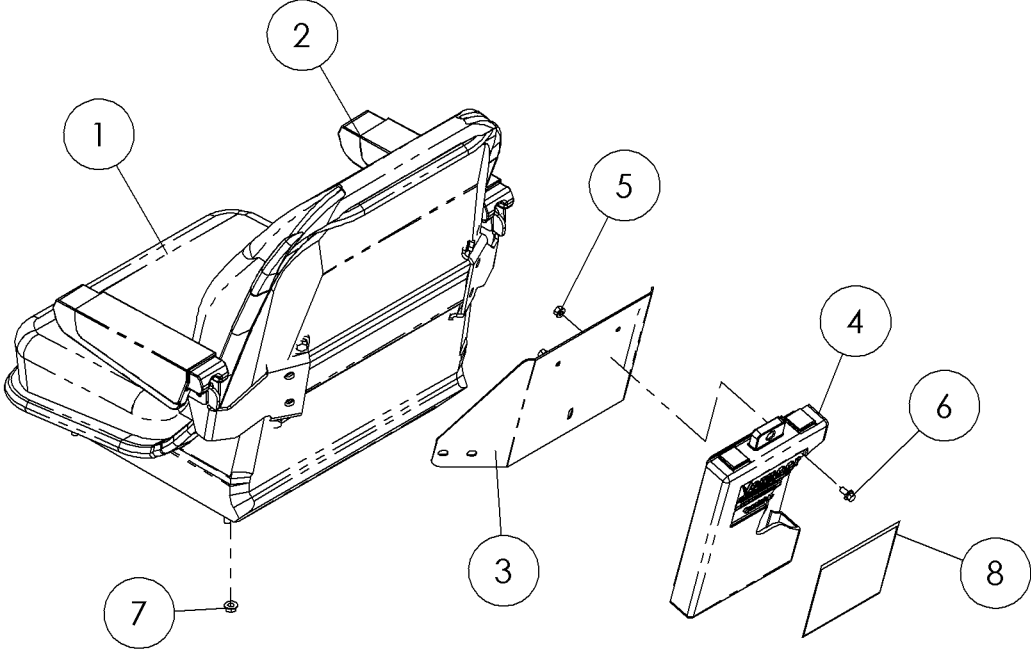


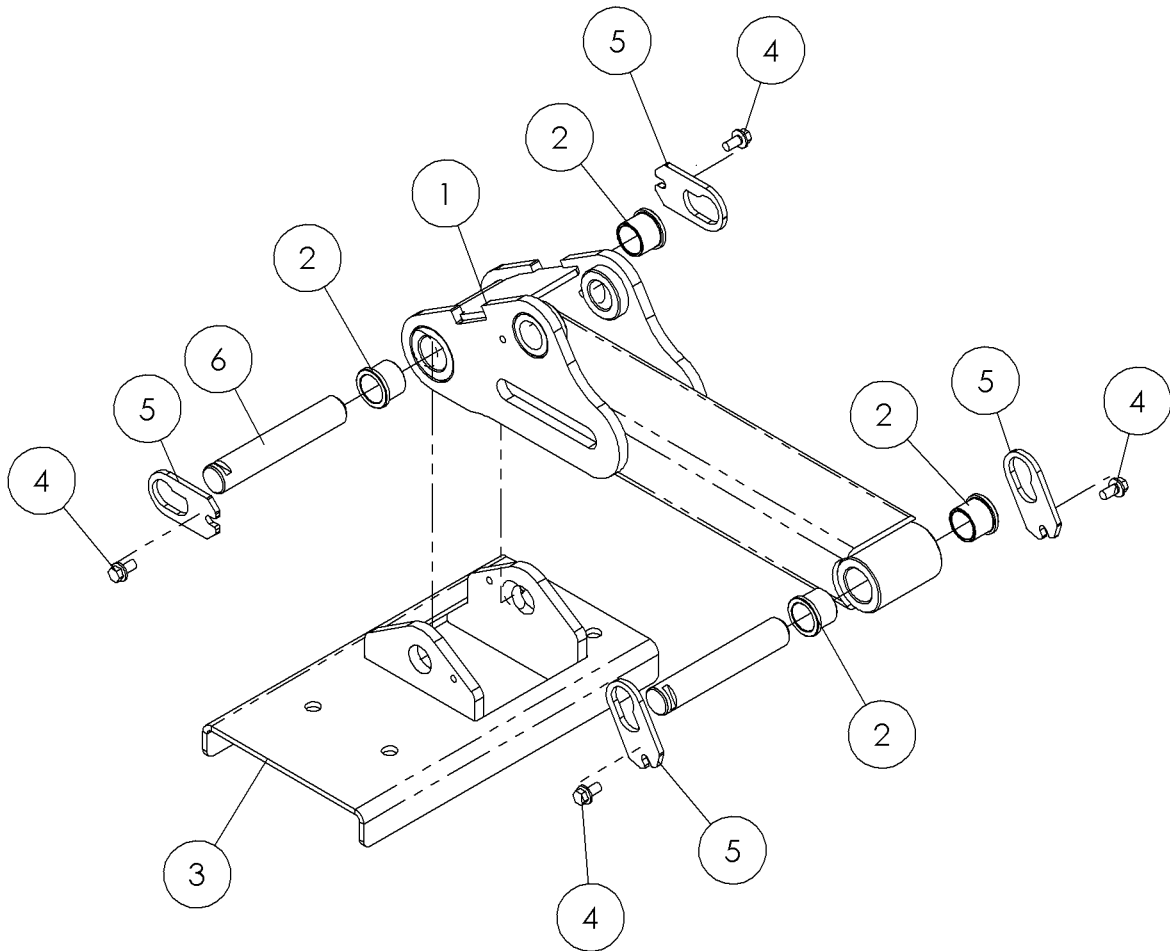
Illustration No. 296306044

## Components-Seat Fig 3-14z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296274289	SEAT - MILSCO XR210 GRAY	1	
		219186003	SWITCH-SAFETY	1	Not Shown
		4473004	1/4-20X1/2 FLGE WHIZ BOLT	2	Not Shown
2		220238001	KIT-MILSCO OLYMPIC ARM REST	1	Inc. Left And Right Armrest
3		235683001	MOUNT-MANUAL BOX	1	
4		142410001	CASE-6"X9 XCX X1" OPERATOR MANUAL	1	
5		405001	NUT-1/4 NC FLG WHIZ LOCK	3	
6		296300751	SCREW HFS-.25-20X50GR8-Y2	3	
7		510352507	NUT - SMFLGTL - .31- 18 - F - YZ	4	
8		2326940	DECAL-NOTICE TO OWNERS	1	Domestic/International

Outrigger Frame (S/N 293-) Fig 3-15r01

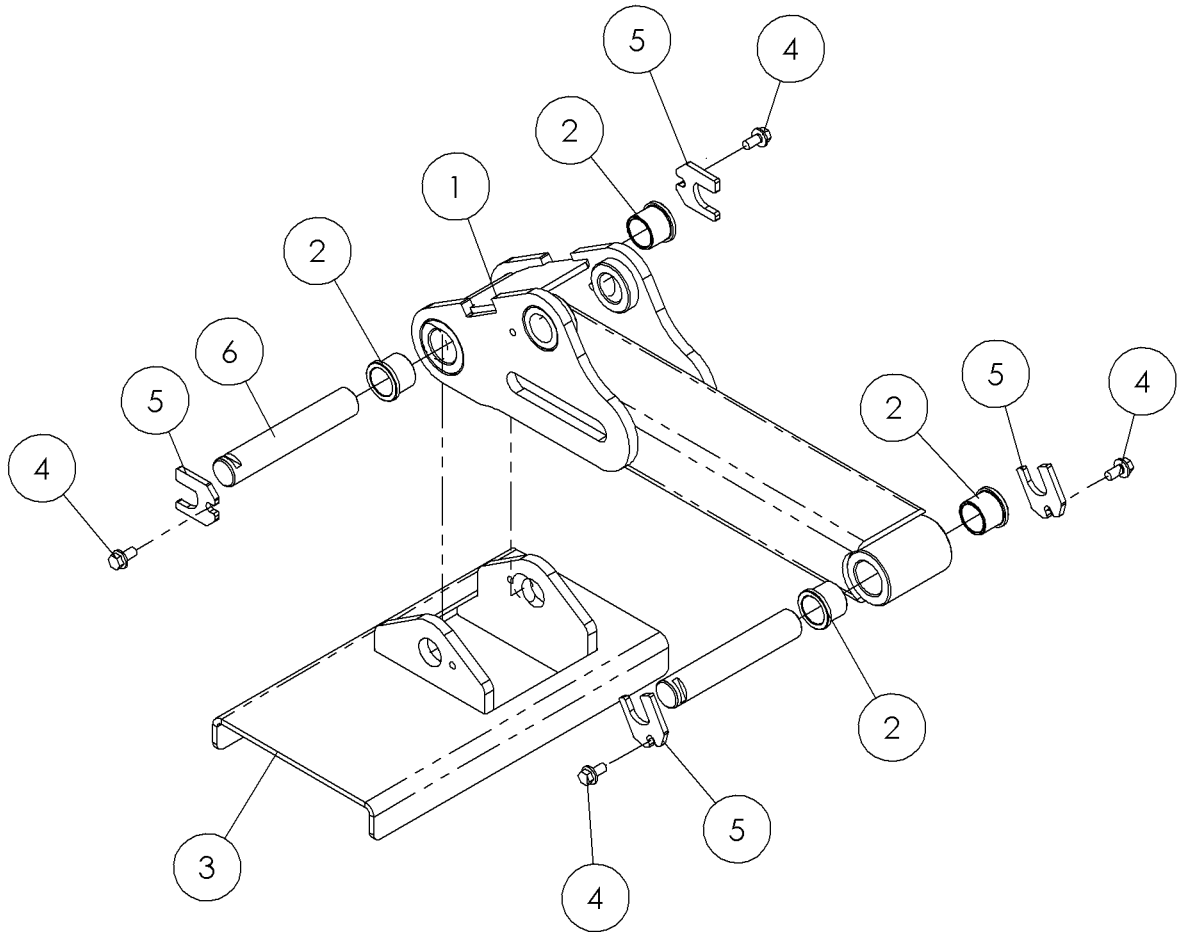
Illustration No. 296288689



## Outrigger Frame (S/N 293-) Fig 3-15r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288609	OUTRIGGER ARM	1	
2		296271490	BUSHING-FLANGE-1.50 ODX1.25 IDX1.25	4	
3		296296120	PAD - OUTRIGGER	1	
4		296300771	SCREW-HFS-..38-16X.75GR8-YZ	4	
5		296293878	*PLATE - PIN LOCK	4	
6		296293877	PIN - RACK LIFT	2	

Outrigger Frame (S/N 101-292) Fig 3-15



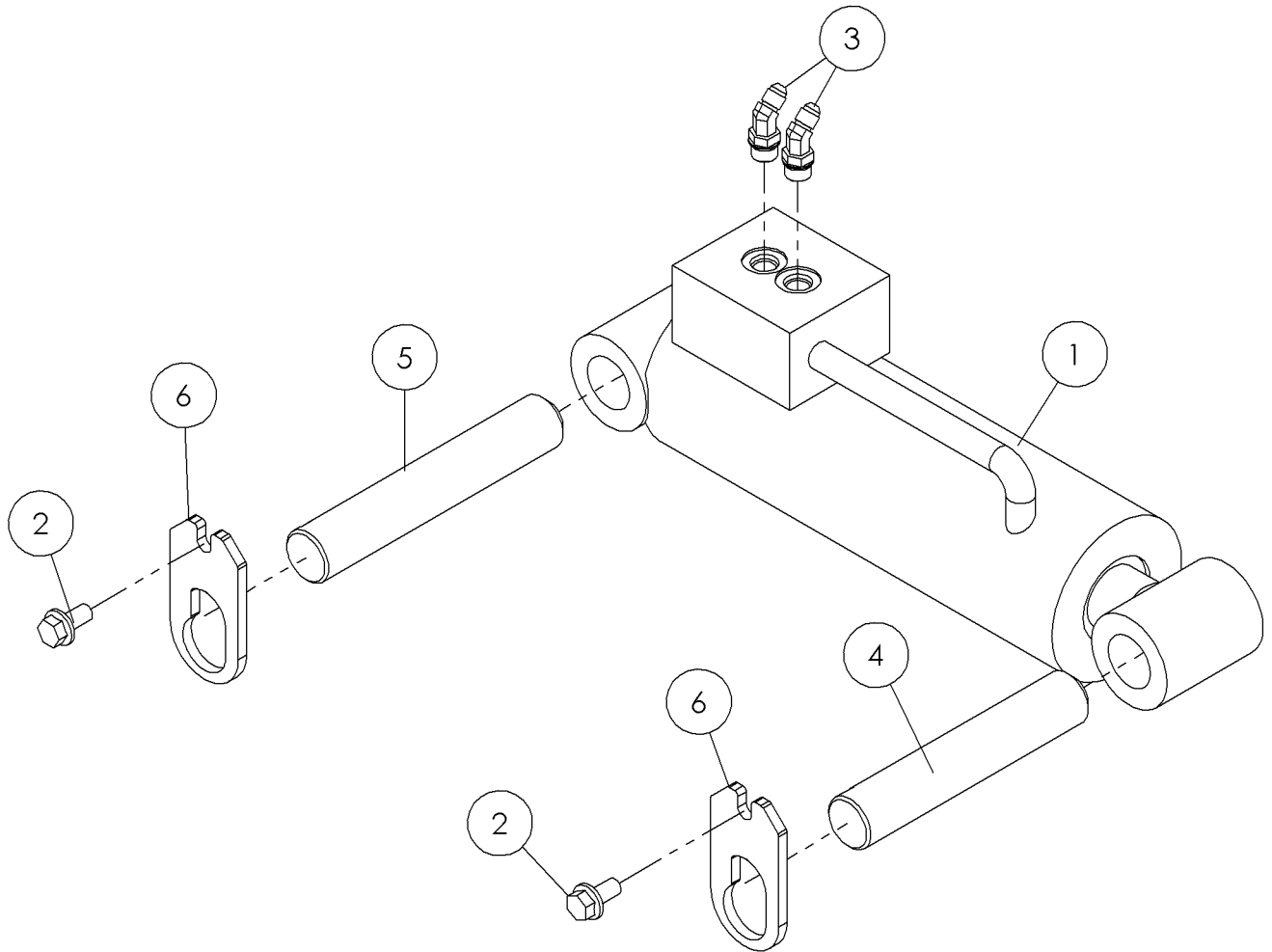


## Outrigger Frame (S/N 101-292) Fig 3-15

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288609	OUTRIGGER ARM	1	
2		296271490	BUSHING-FLANGE-1.50 ODX1.25 IDX1.25	4	
3		296296120	PAD - OUTRIGGER	1	
4		296300771	SCREW-HFS-..38-16X.75GR8-YZ	4	
5		296293878	PLATE - PIN LOCK	4	
6		296293877	PIN - RACK LIFT	2	

Outrigger Cylinder (S/N 293-) Fig 3-16r01

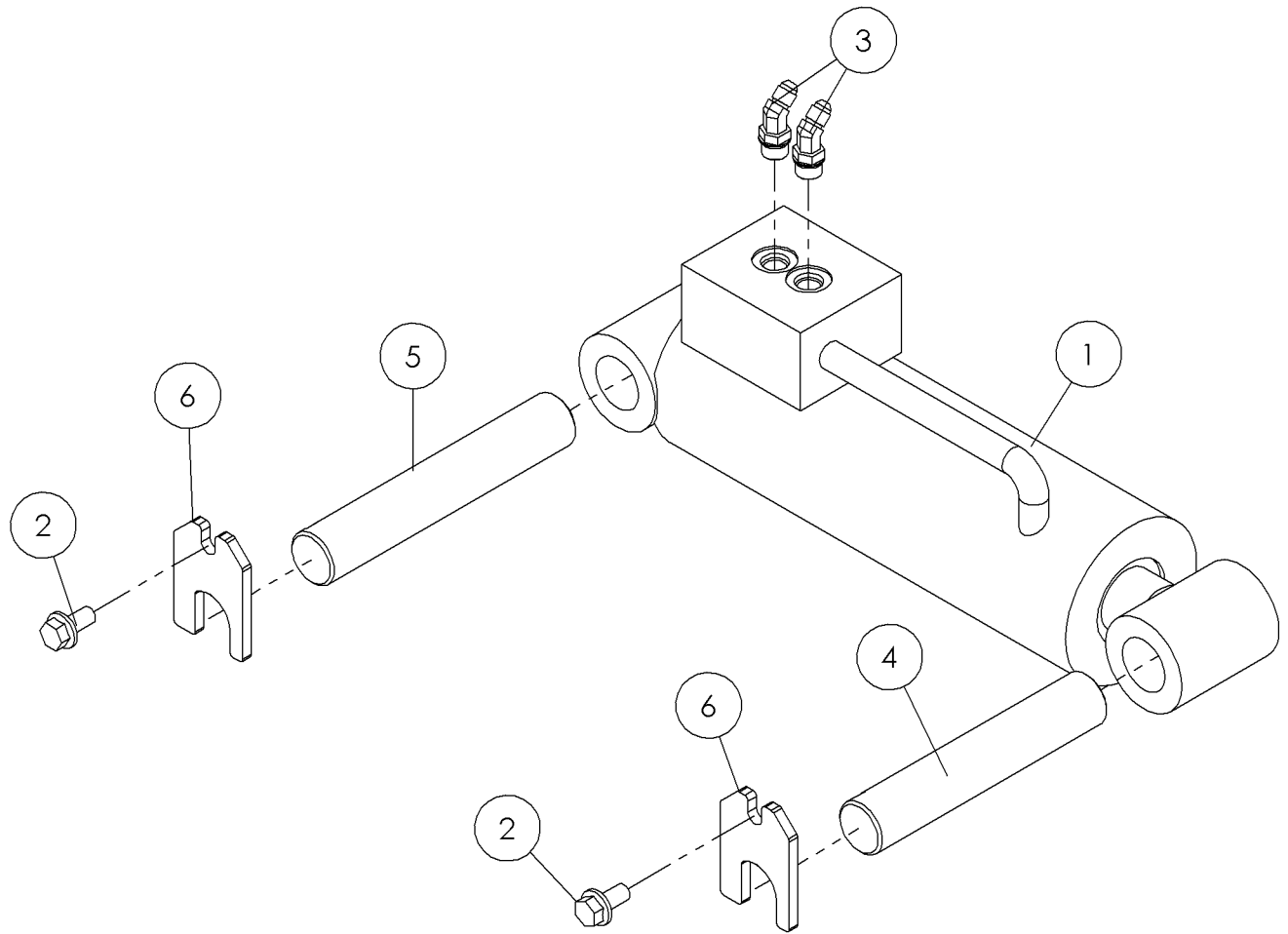
Illustration No. 296288698



## Outrigger Cylinder (S/N 293-) Fig 3-16r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288728	CYLINDER-3 1/2"BORE X 1.50" ROD X 7" STROKE	1	Breakdown Fig. 3-16z01
2		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
3		82931001	FITTING-45-4MJX6MORBA	2	
4		296296121	PIN - OUTRIGGER CYL	1	
5		296293877	PIN - RACK LIFT	1	
6		296293878	*PLATE - PIN LOCK	2	

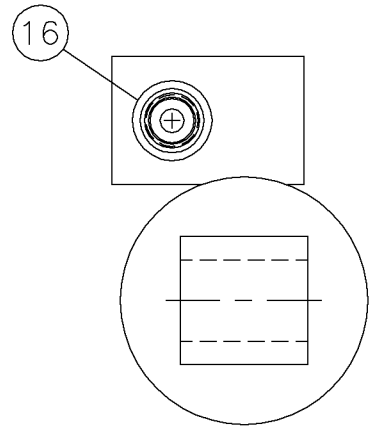
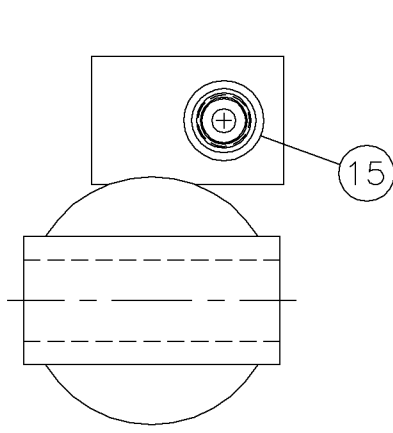
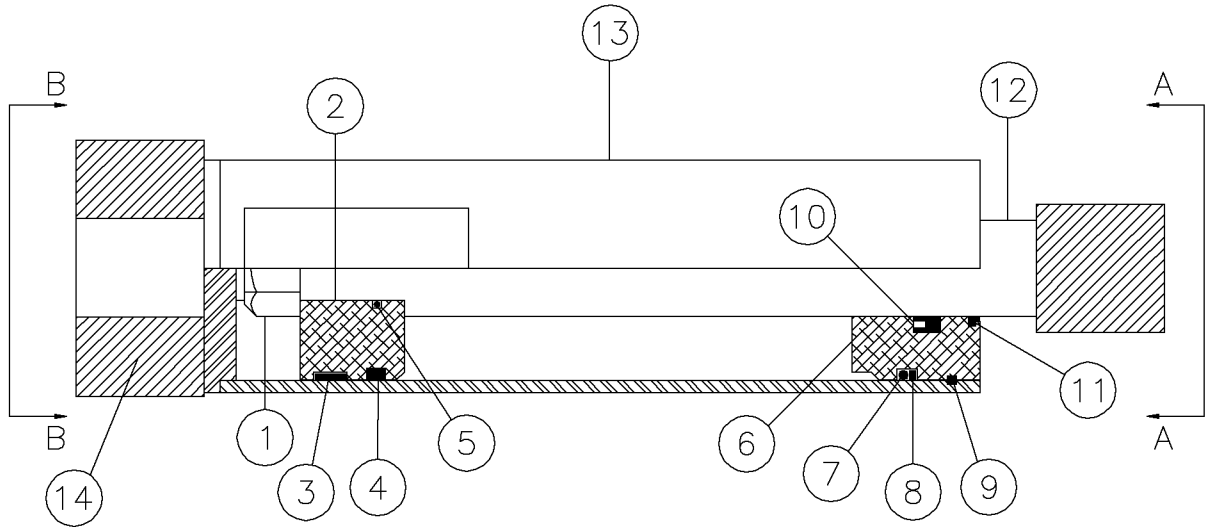
Outrigger Cylinder (S/N 101-292) Fig 3-16



## Outrigger Cylinder (S/N 101-292) Fig 3-16

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288728	CYLINDER-3 1/2"BORE X 1.50" ROD X 7" STROKE	1	Breakdown Fig. 3-16a
2		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
3		82931001	FITTING-45-4MJX6MORBA	2	
4		296296121	PIN - OUTRIGGER CYL	1	
5		296293877	PIN - RACK LIFT	1	
6		296293878	PLATE - PIN LOCK	2	

Components-Outrigger Cylinder Fig 3-16z01



## Components-Outrigger Cylinder Fig 3-16z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1		306011	NUT-1-14 SL PRINCE 220000210	1	
2		610291001	PISTON	1	
3		NSS	WEAR RING	1	Not Sold Separately
4		NSS	PSP SEAL	1	Not Sold Separately
5		NSS	O-RING	1	Not Sold Separately
6		278769009	HEAD	1	
7		NSS	O-RING	1	Not Sold Separately
8		NSS	BACKUP	1	Not Sold Separately
9		610292001	RETAINING RING	1	
10		NSS	POLYPAK	1	Not Sold Separately
11		NSS	DUST SEAL	1	Not Sold Separately
12		278769015	SHAFT W/ CLEVIS	1	
13		278769017	BARREL ASSEMBLY (W/O VALVE)	1	
14		70070003	BEARING-COMPOSITE 1 LONG	4	
15		117037001	VALVE-COUNTERBALANCE CBBB-LJN	1	
		278769021	REPAIR KIT	2	
16		278769023	VALVE	1	
		278769021	REPAIR KIT		
	*	296288728	CYLINDER-3 1/2"BORE X 1.50" ROD X 7" STROKE	1	(Inc. All Items In Figure.)
		278769025	REPAIR KIT	1	(Inc. Ref. 3-5, 7, 8, 10, & 11)

Platform Fig 3-17

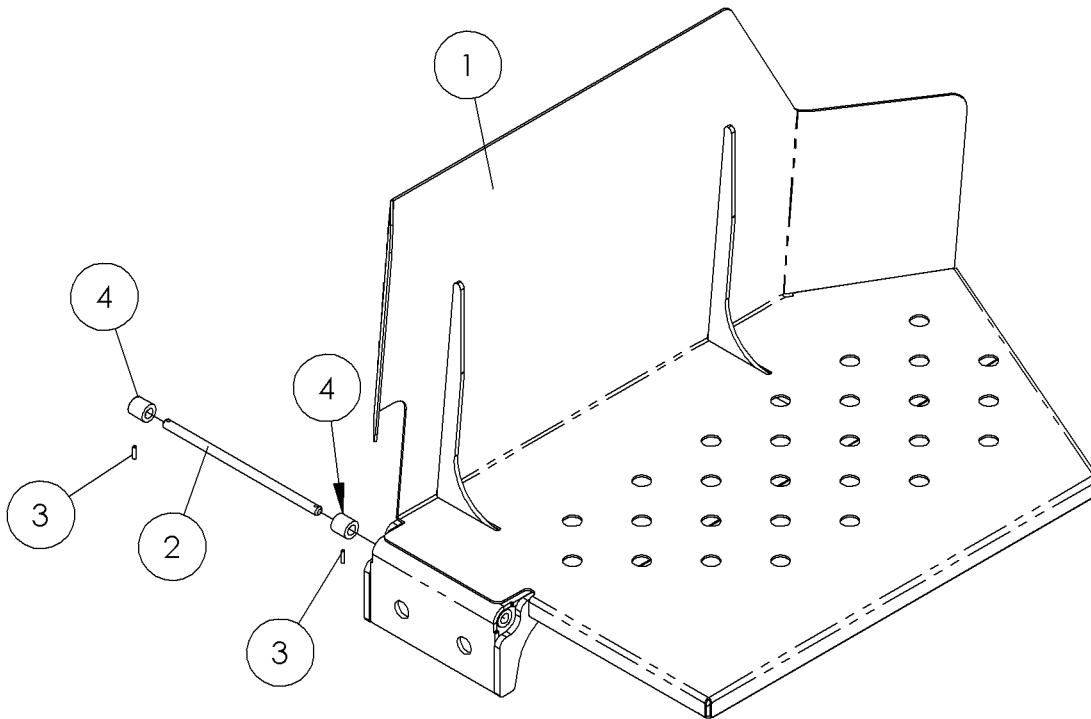


Illustration No. 296293803

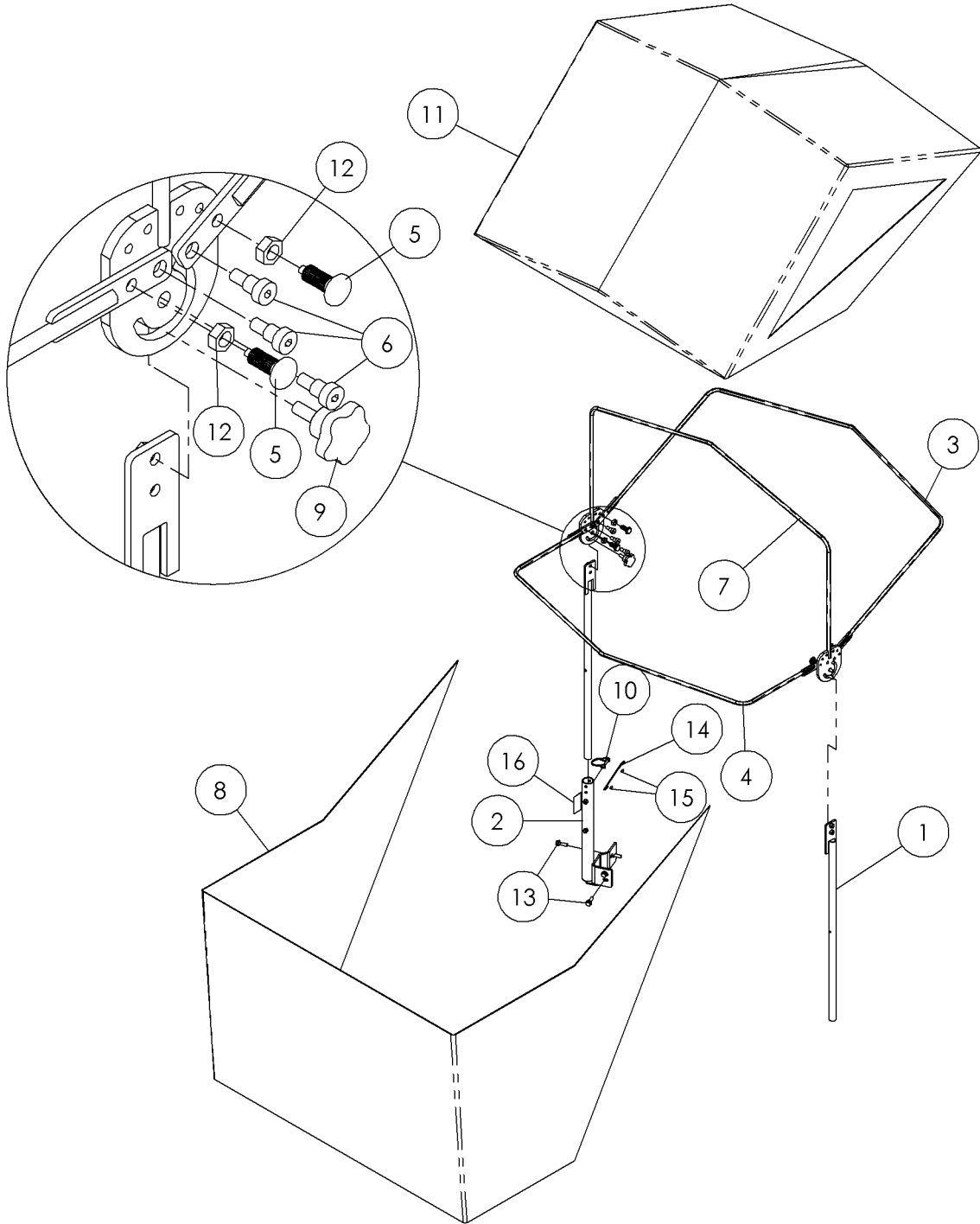


Platform Fig 3-17

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296293790	PLATFORM WELDMENT	1	
2		296288747	ROD - 1/2" OD PIVOT	1	
3		1788041	PIN EXPANSION 3/16 X 3/4 ZINC	2	
4		296276595	CAP - PIN RETAINER	2	

Soft Cab Option Fig 3-18

Illustration No. 296305517

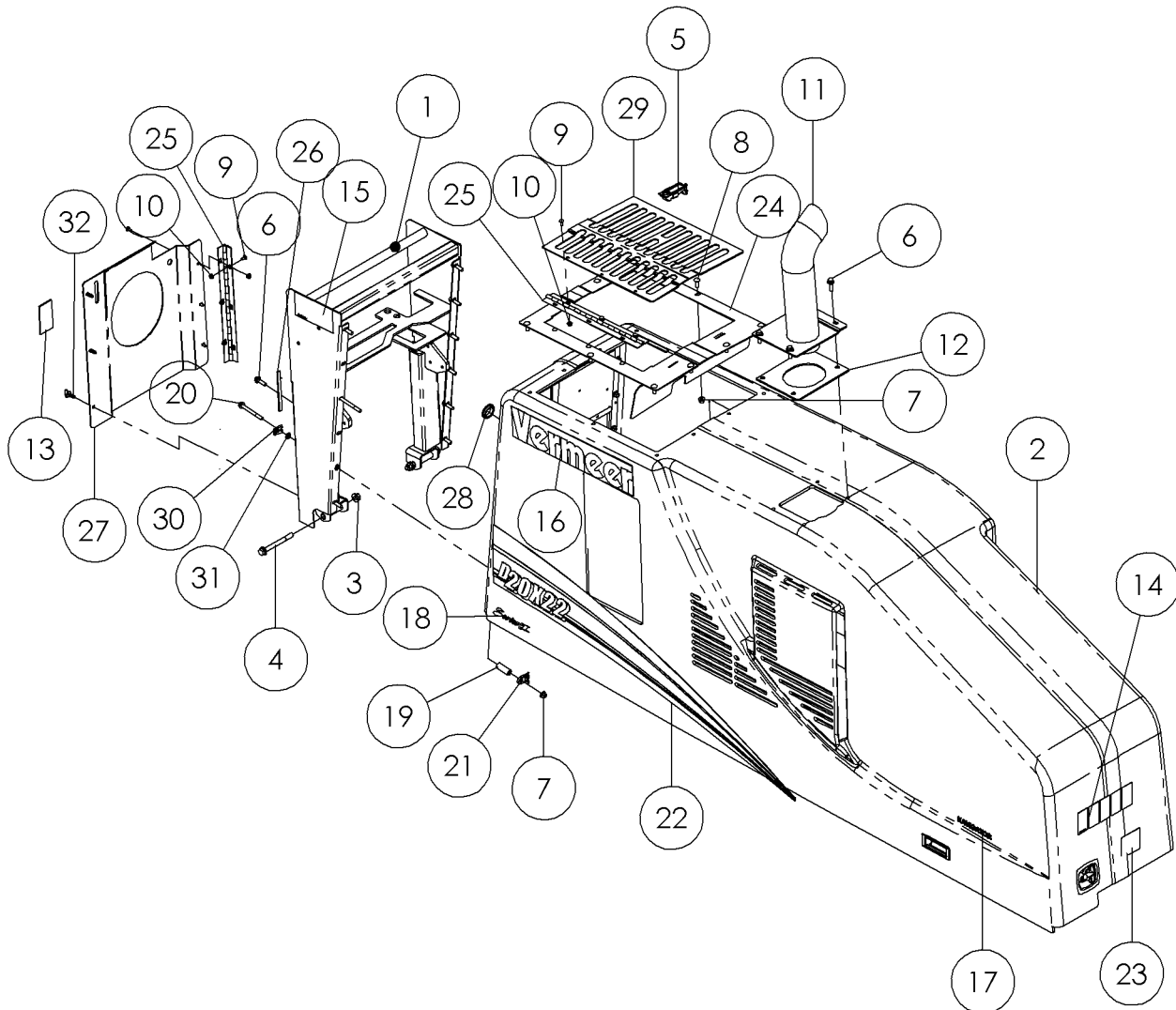


## Soft Cab Option Fig 3-18

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296305515	FRAME - CANOPY LOWER WELDMENT	2	
2		296308023	MOUNT - UMBRELLA LH	1	
3		296305516	WELDMENT - FRONT BAR CANOPY	1	
4		296308066	WELDMENT - CANOPY REAR	1	
5		296308079	PLUNGER-SPRING	4	
6		240056001	SCREW-SHSS-.50X.50-.38-16THD-CZ	6	
7		296308026	WELDMENT - CANOPY TOP CENTER	1	
8		296308077	CANOPY - BACK	1	
9		296276742	KNOB - ADJUSTMENT	2	
10		2108001	LYNCH PIN - 1/4 X 2	1	
11		296308078	CANOPY - TOP	1	
12		75383001	NUT-1/2-UNC GR.8 JAM HEX	4	
13		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	4	
14		1830007	CABLE - 3/32" NYLON COATED (FT)	1	
15		1838001	CONNECTOR-WIRE (ETC)	2	
16		700ID936	DECAL - WARNING - SECURE WITH LOCK PIN	1	

Engine Hood (S/N 302-) Fig 4-1r05

Illustration No. 296284463

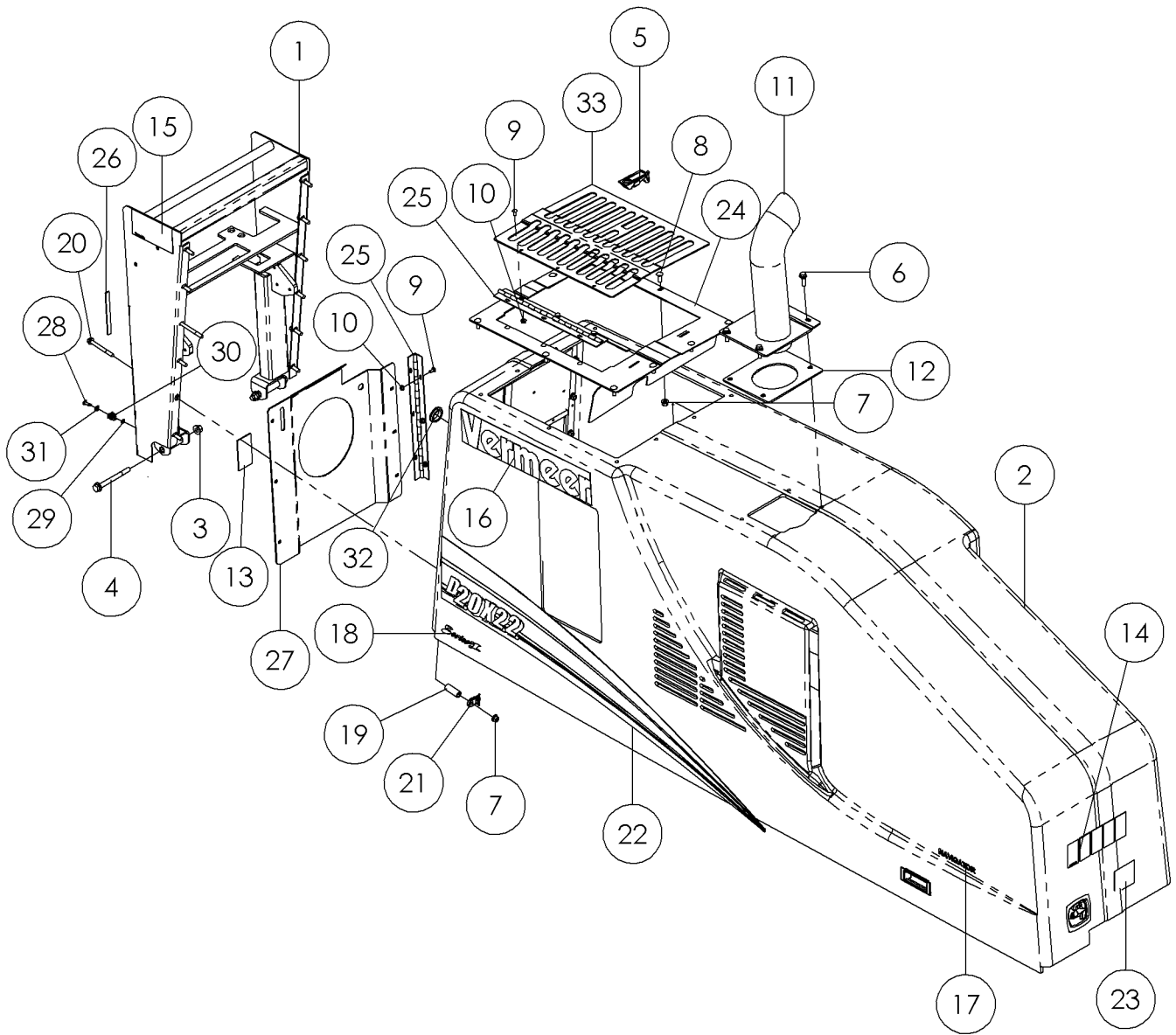


## Engine Hood (S/N 302-) Fig 4-1r05

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306067	FRAME - HOOD PIVOT	1	Breakdown Fig. 4-1z01
2		296306073	HOOD - D16X20IIX20X22II	1	
3		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
4		296300929	SCREW-HFS-.50-13X5.00-GR8-YZ	2	
5		218080001	LATCH-ADJ.LEVER W/RAISED BUTTN(INC KEYS)	1	
6		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	14	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	22	
8		375010	BOLT-3/8"-16X1"GD#5 CARRIAGE	10	
9		373005	BOLT-1/4-20X5/8 GR5 CARRIAGE	12	
10		1809005	NUT-1/4 SM FLGE T.L.	12	
11		296306072	WELDMENT - EXHAUST OUTLET	1	
12		296294154	WELDMENT - HOOD EXHAUST PLATE	1	
13		7000B304	DECAL - WARNING	1	Domestic
13		700IB304	DECAL - WARNING	1	International
14		7000B812	DECAL - WARNING	1	Domestic
14		700IB812	DECAL - WARNING	1	International
15		7000A576	DECAL-DANGER	1	Domestic
15		700IA576	DECAL-DANGER	1	International
16		2326595	DECAL VERMEER- 4 1/2 X 24	1	Domestic/International
17		70000614	DECAL-MODEL NAVIGATOR (BIG)	1	Domestic/International
18		7000c463	DECAL - SERIES II MEDIUM	1	Domestic/International
19		56254001	SPACER	2	
20		296300931	SCREW-HFS-.38-16X3.50-GR8-YZ	2	
21		296276018	MOUNT HELLER MANN TITON	2	
22		7000d581	DECAL - D20X22II STRIPE	1	Domestic/International
23		7000b119	DECAL - PATENT INDUSTRIAL	1	Domestic/International
24		296306113	WELDMENT - TOP HOOD ACCESS	1	
25		285088001	HINGE - ACCESS DOOR	2	
26		282764001	WEATHER STRIP	3	
27		296306060	PANEL - REAR ACCESS	1	
28		224616001	GROMMET-1 1/4 ID X 1/8 GROOVE	1	
29		296306106	PLATE - HYD TANK ACCESS DOOR	1	
30		296303699	*RECEPTACLE - CLIP ON	3	(S/N 302-)
31		296303698	*RETAINER-NYLON-BLACK	3	(S/N 302-)
32		296303697	*FASTENER - THUMB SCREW	3	(S/N 302-)

Engine Hood (S/N 291-301) Fig 4-1r04

Illustration No. 296284463



## Engine Hood (S/N 291-301) Fig 4-1r04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306067	*FRAME - HOOD PIVOT	1	
2		296306073	HOOD - D16X20IIX20X22II	1	Breakdown Fig. 4-1z01
3		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
4		296300929	SCREW-HFS-.50-13X5.00-GR8-YZ	2	
5		218080001	LATCH-ADJ.LEVER W/RAISED BUTTN(INC KEYS)	1	
6		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	14	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	22	
8		375010	BOLT-3/8"-16X1"GD#5 CARRIAGE	10	
9		373005	BOLT-1/4-20X5/8 GR5 CARRIAGE	12	
10		1809005	NUT-1/4 SM FLGE T.L.	12	
11		296306072	WELDMENT - EXHAUST OUTLET	1	
12		296294154	WELDMENT - HOOD EXHAUST PLATE	1	
13		7000B304	DECAL - WARNING	1	Domestic
13		700IB304	DECAL - WARNING	1	International
14		7000B812	DECAL - WARNING	1	Domestic
14		700IB812	DECAL - WARNING	1	International
15		7000A576	DECAL-DANGER	1	Domestic
15		700IA576	DECAL-DANGER	1	International
16		2326595	DECAL VERMEER- 4 1/2 X 24	1	Domestic/International
17		70000614	DECAL-MODEL NAVIGATOR (BIG)	1	Domestic/International
18		7000c463	DECAL - SERIES II MEDIUM	1	Domestic/International
19		56254001	SPACER	2	
20		296300931	SCREW-HFS-.38-16X3.50-GR8-YZ	2	
21		296276018	MOUNT HELLER MANN TITON	2	
22		7000D581	DECAL - D20X22II STRIPE	1	Domestic/International
23		7000b119	DECAL - PATENT INDUSTRIAL	1	Domestic/International
24		296306113	WELDMENT - TOP HOOD ACCESS	1	
25		285088001	HINGE - ACCESS DOOR	2	
26		282764001	WEATHER STRIP	3	
27		296306060	PANEL - REAR ACCESS	1	
28		161503001	STUD - 1/4 TURN CAPTURED	3	
29		161504001	RETAINER - 1/4 TURN	3	
30		161505001	RECEPTACLE - SNAP IN	3	
31		161506001	WASHER - NYLON WEAR	3	
32		224616001	GROMMET-1 1/4 ID X 1/8 GROOVE	1	
33		296306106	PLATE - HYD TANK ACCESS DOOR	1	

Engine Hood (S/N 168-290) Fig 4-1r03

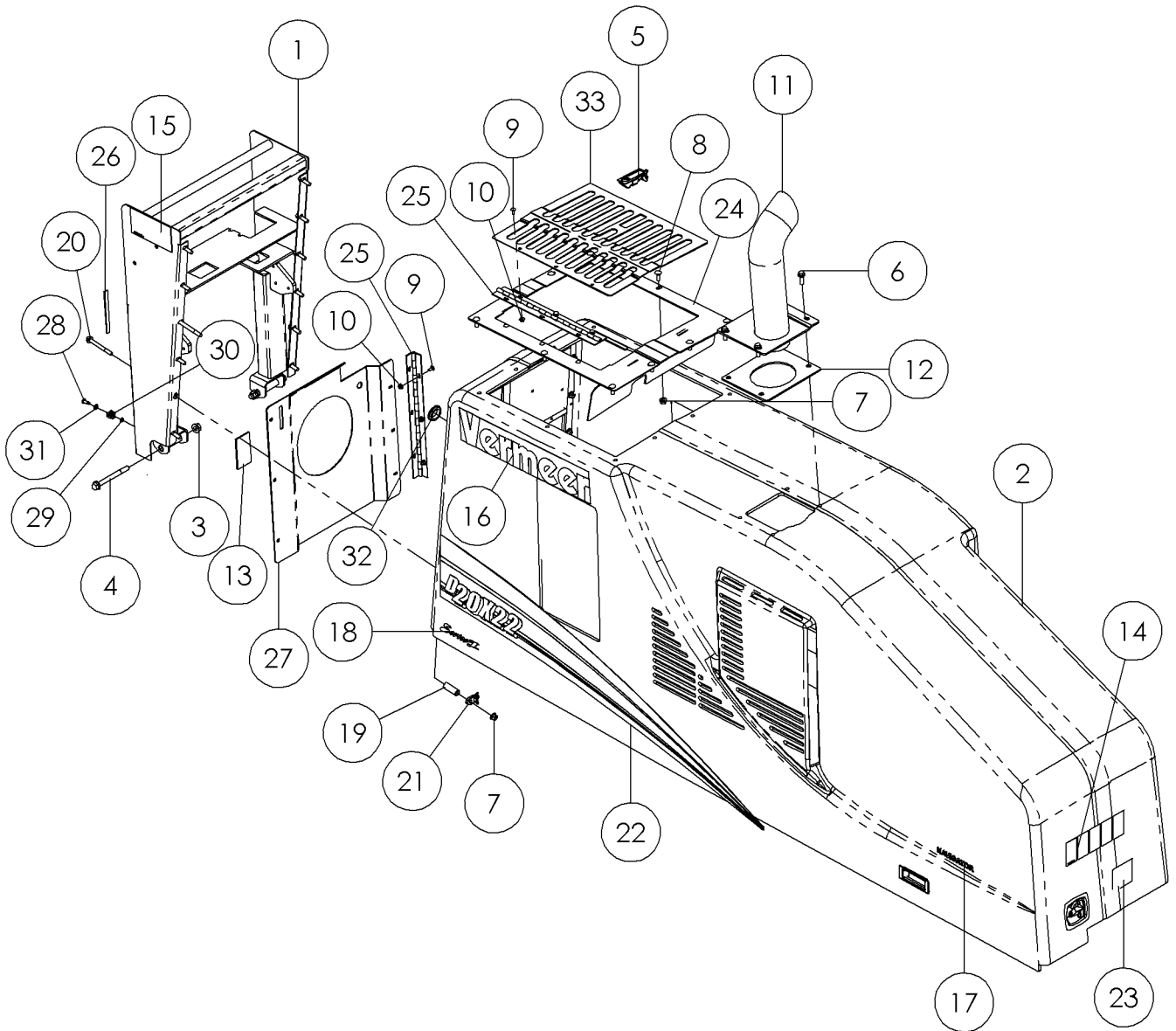


Illustration No. 296284463



## Engine Hood (S/N 168-290) Fig 4-1r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	April, 2008		Update In Illustration & Parts List.
1		296306067	FRAME - HOOD PIVOT	1	
2		296306073	HOOD - D16X20IIX20X22II	1	Breakdown Fig. 4-1a
3		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
4		296300929	SCREW-HFS-.50-13X5.00-GR8-YZ	2	
5		218080001	LATCH-ADJ.LEVER W/RAISED BUTTN(INC KEYS)	1	
6		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	14	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	22	
8		375010	BOLT-3/8"-16X1"GD#5 CARRIAGE REF T08435	10	
9		373005	BOLT-1/4-20X5/8 GR5 CARRIAGE	12	
10		1809005	NUT-1/4 SM FLGE T.L.	12	
11		296306072	WELDMENT - EXHAUST OUTLET	1	(S/N 168-)
12		296294154	WELDMENT - HOOD EXHAUST PLATE	1	
13		7000B304	DECAL - WARNING	1	Domestic
		700IB304	DECAL - WARNING	1	International
14		7000B812	DECAL - WARNING	1	Domestic
		700IB812	DECAL - WARNING	1	International
15		7000A576	DECAL-DANGER	1	Domestic
		700IA576	DECAL-DANGER	1	International
16		2326595	DECAL VERMEER- 4 1/2 X 24	1	Domestic/International
17		70000614	DECAL-MODEL NAVIGATOR (BIG)	1	Domestic/International
18		7000C463	DECAL - SERIES II MEDIUM	1	Domestic/International
19		56254001	SPACER	2	
20		296300931	SCREW-HFS-.38-16X3.50-GR8-YZ	2	
21		296276018	MOUNT HELLER MANN TITON	2	
22		7000D581	DECAL - D20X22II STRIPE	1	Domestic/International
23		7000B119	DECAL - PATENT INDUSTRIAL	1	Domestic/International
24		296306113	WELDMENT - TOP HOOD ACCESS	1	
25		285088001	HINGE - ACCESS DOOR	2	
26		282764001	WEATHER STRIP	3	
27		296306060	PANEL - REAR ACCESS	1	
28		161503001	STUD - 1/4 TURN CAPTURED	3	
29		161504001	RETAINER - 1/4 TURN	3	
30		161505001	RECEPTACLE - SNAP IN	3	
31		161506001	WASHER - NYLON WEAR	3	
32		224616001	GROMMET-1 1/4 ID X 1/8 GROOVE	1	
33		296306106	PLATE - HYD TANK ACCESS DOOR	1	

Engine Hood (S/N 147-167) Fig 4-1r02

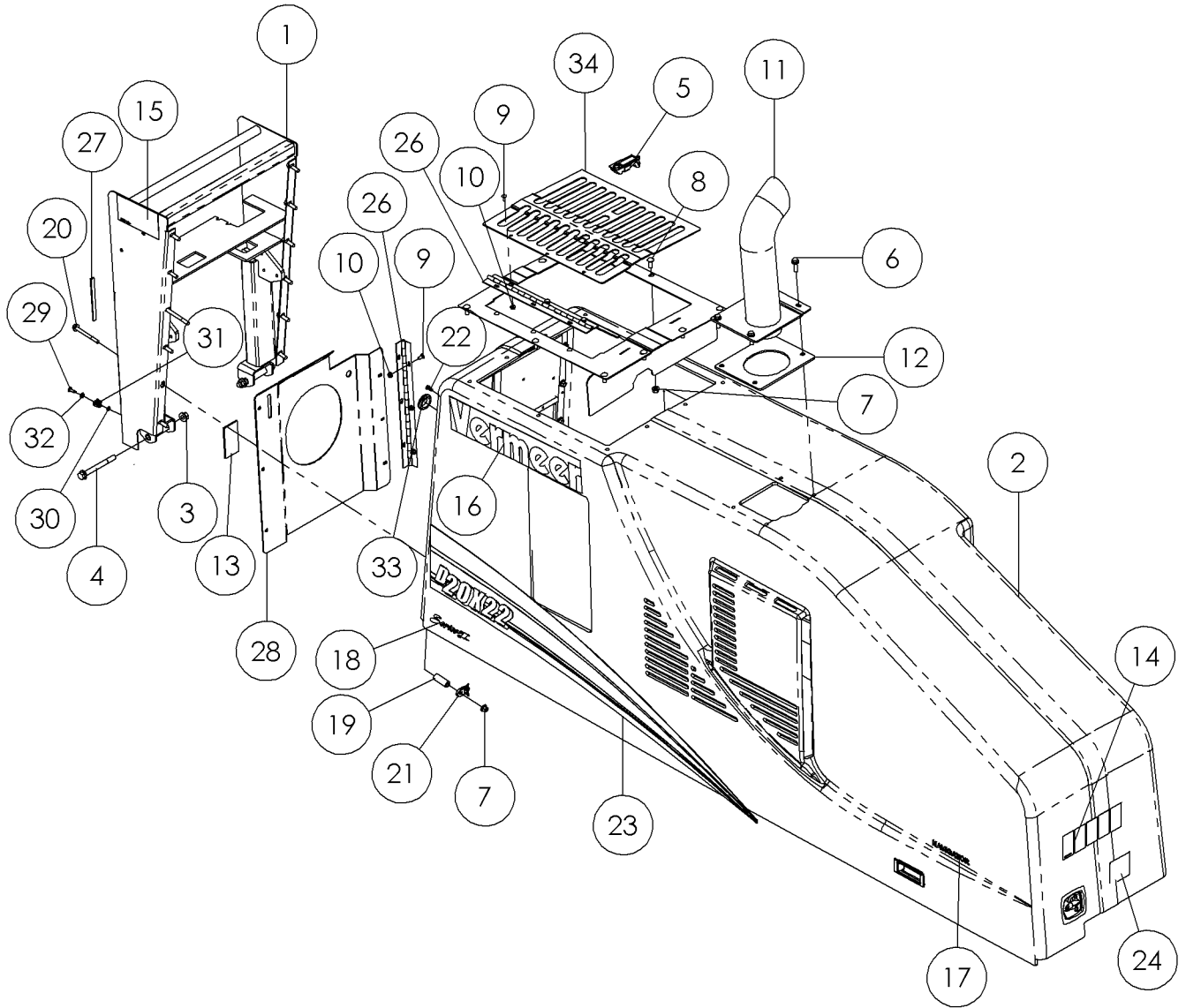


Illustration No. 296284463

## Engine Hood (S/N 147-167) Fig 4-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296306067	FRAME - HOOD PIVOT	1	
2		296306073	HOOD - D16X20IIX20X22II	1	
3		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
4		296300929	SCREW-HFS-.50-13X5.00-GR8-YZ	2	
5		218080001	LATCH-ADJ.LEVER W/RAISED BUTTN(INC KEYS)	1	
6		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	14	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	22	
8		375010	BOLT-3/8"-16X1"GD#5 CARRIAGE	10	
9		373005	BOLT-1/4-20X5/8 GR5 CARRIAGE	12	
10		1809005	NUT-1/4 SM FLGE T.L.	12	
11		296306072	WELDMENT - EXHAUST OUTLET	1	
12		296294154	WELDMENT - HOOD EXHAUST PLATE	1	
13		7000B304	DECAL - WARNING	1	Domestic
		700IB304	DECAL - WARNING	1	International
14		7000B812	DECAL - WARNING	1	Domestic
		700IB812	DECAL - WARNING	1	International
15		7000A576	DECAL-DANGER	1	Domestic
		700IA576	DECAL-DANGER	1	International
16		2326595	DECAL VERMEER- 4 1/2 X 24	1	
17		70000614	DECAL-MODEL NAVIGATOR (BIG)	1	
18		7000C463	DECAL - SERIES II MEDIUM	1	
19		56254001	SPACER	2	
20		296300931	SCREW-HFS-.38-16X3.50-GR8-YZ	2	
21		296276018	MOUNT HELLER MANN TITON	2	
22		156723001	CABLE TIE ANCHOR	1	
23		7000D581	DECAL - D20X22II STRIPE	1	
24		7000B119	DECAL - PATENT INDUSTRIAL	1	
25	*	296306113	WELDMENT - TOP HOOD ACCESS	1	(SN 147-)
26		285088001	HINGE - ACCESS DOOR	2	
27		282764001	WEATHER STRIP	3	
28		296306060	PANEL - REAR ACCESS	1	
29		161503001	STUD - 1/4 TURN CAPTURED	3	
30		161504001	RETAINER - 1/4 TURN	3	
31		161505001	RECEPTACLE - SNAP IN	3	
32		161506001	WASHER - NYLON WEAR	3	
33		224616001	GROMMET-1 1/4 ID X 1/8 GROOVE	1	
34	*	296306106	PLATE - HYD TANK ACCESS DOOR	1	(SN 147-)

Engine Hood (S/N 109-146) Fig 4-1r01

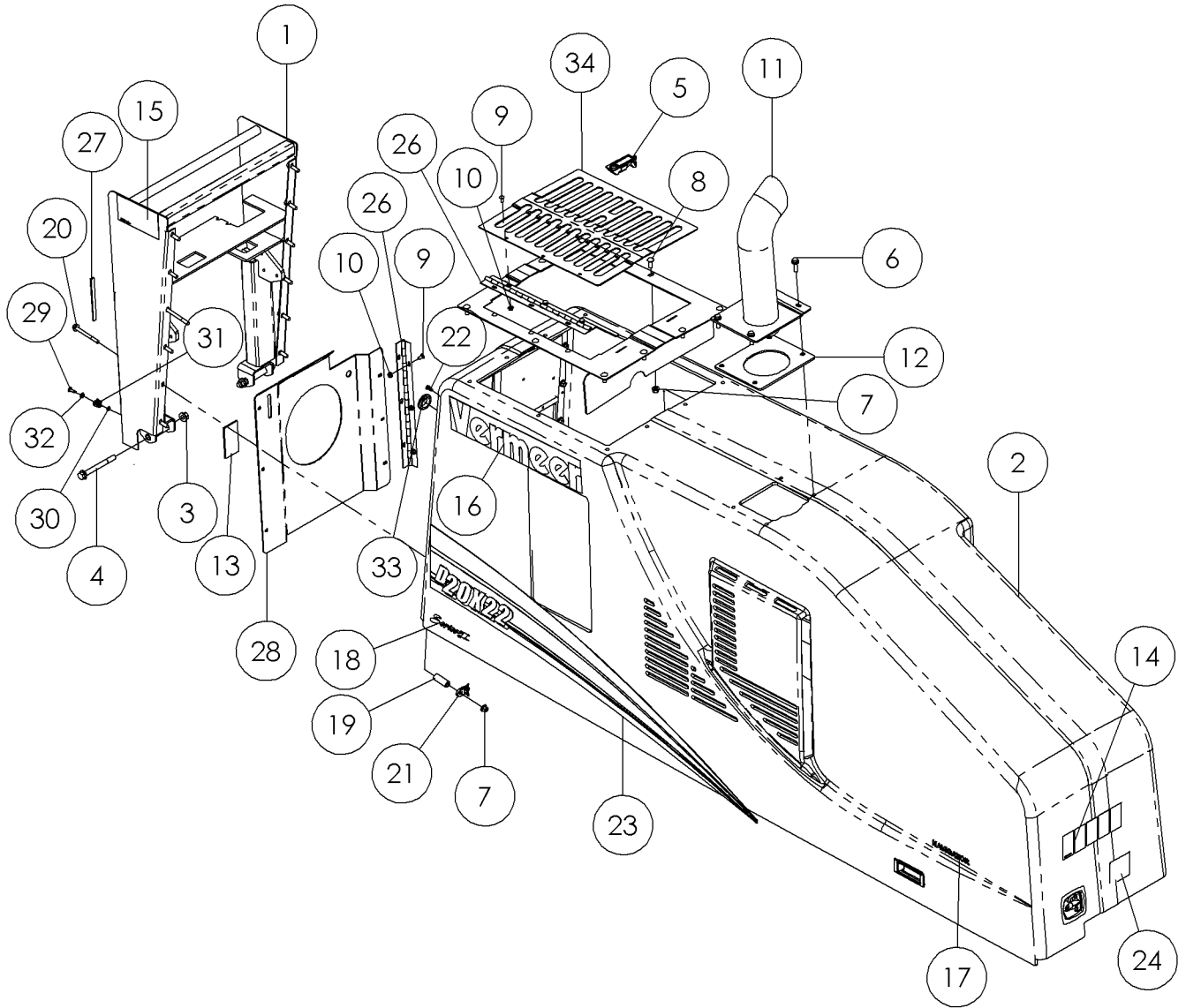


Illustration No. 296284463

## Engine Hood (S/N 109-146) Fig 4-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1	*	296306067	FRAME - HOOD PIVOT	1	
2	*	296306073	HOOD - D20X22II/D16X20II	1	Breakdown Fig. 4-1a
3		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
4		296300929	SCREW-HFS-.50-13X5.00-GR8-YZ	2	
5		218080001	LATCH-ADJ.LEVER W/RAISED BUTTN(INC KEYS)	1	
6		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	14	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	22	
8		375010	BOLT-3/8"-16X1"GD#5 CARRIAGE	10	
9		373005	BOLT-1/4-20X5/8 GR5 CARRIAGE	12	
10		1809005	NUT-1/4 SM FLGE T.L.	12	
11		296306072	WELDMENT - EXHAUST OUTLET	1	
12		296294154	WELDMENT - HOOD EXHAUST PLATE	1	
13		7000B304	DECAL - WARNING	1	Domestic
		700IB304	DECAL - WARNING	1	International
14		7000B812	DECAL - WARNING	1	Domestic
		700IB812	DECAL - WARNING	1	International
15		7000A576	DECAL-DANGER	1	Domestic
		700IA576	DECAL-DANGER	1	International
16		2326595	DECAL VERMEER- 4 1/2 X 24	1	
17		70000614	DECAL-MODEL NAVIGATOR (BIG)	1	
18		7000C463	DECAL - SERIES II MEDIUM	1	
19		56254001	SPACER	2	
20		296300931	SCREW-HFS-.38-16X3.50-GR8-YZ	2	
21		296276018	MOUNT HELLER MANN TITON	2	
22		156723001	CABLE TIE ANCHOR	1	
23		7000D581	DECAL - D20X22II STRIPE	1	
24		7000B119	DECAL - PATENT INDUSTRIAL	1	
25		296306069	WELDMENT - TOP HOOD ACCESS	1	
26		285088001	HINGE - ACCESS DOOR	2	
27		282764001	WEATHER STRIP	3	
28		296306060	PANEL - REAR ACCESS	1	
29		161503001	STUD - 1/4 TURN CAPTURED	3	
30		161504001	RETAINER - 1/4 TURN	3	
31		161505001	RECEPTACLE - SNAP IN	3	
32		161506001	WASHER - NYLON WEAR	3	
33		224616001	GROMMET-1 1/4 ID X 1/8 GROOVE	1	
34		296306070	PLATE - HYD TANK ACCESS DOOR	1	

Engine Hood (S/N 101-108) Fig 4-1

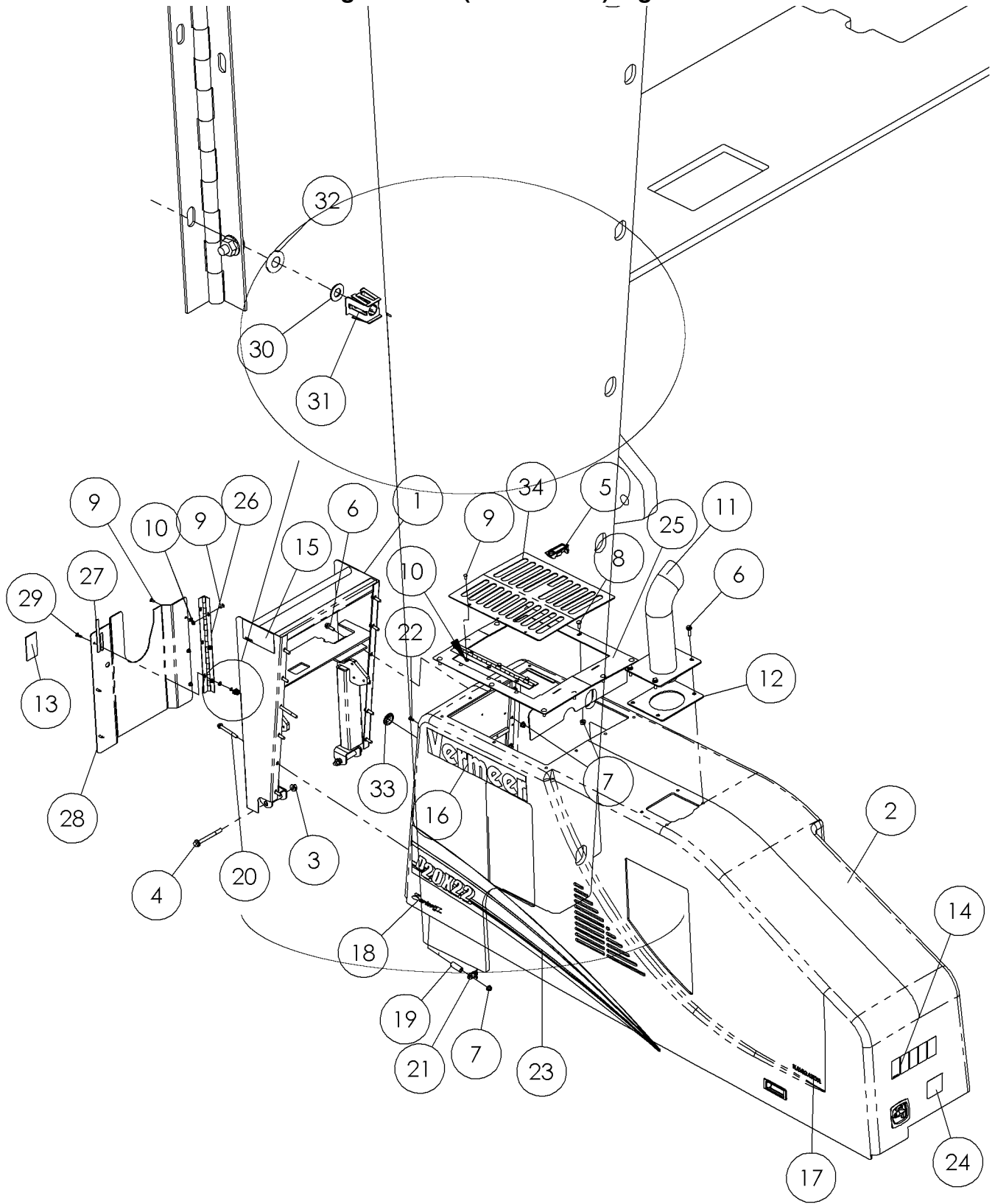


Illustration No. 296284463

## Engine Hood (S/N 101-108) Fig 4-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306067	FRAME - HOOD PIVOT	1	
2		296284393	HOOD-D16 X 20II/D20 X 22II	1	Breakdown Fig. 4-1a
3		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
4		296300929	SCREW-HFS-.50-13X5.00-GR8-YZ	2	
5		218080001	LATCH-ADJ.LEVER W/RAISED BUTTN(INC KEYS)	1	
6		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	14	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	22	
8		375010	BOLT-3/8"-16X1"GD#5 CARRIAGE	10	
9		373005	BOLT-1/4-20X5/8 GR5 CARRIAGE	12	
10		1809005	NUT-1/4 SM FLGE T.L.	12	
11		296294150	WELDMENT - EXHAUST TUBE	1	
12		296294154	WELDMENT - HOOD EXHAUST PLATE	1	
13		7000B304	DECAL - WARNING	1	Domestic
		700IB304	DECAL - WARNING	1	International
14		7000B812	DECAL - WARNING	1	Domestic
		700IB812	DECAL - WARNING	1	International
15		7000A576	DECAL-DANGER	1	Domestic
		700IA576	DECAL-DANGER	1	International
16		2326595	DECAL VERMEER- 4 1/2 X 24	1	Domestic/International
17		70000614	DECAL-MODEL NAVIGATOR (BIG)	1	Domestic/International
18		7000c463	DECAL - SERIES II MEDIUM	1	Domestic/International
19		56254001	SPACER	2	
20		296300931	SCREW-HFS-.38-16X3.50-GR8-YZ	2	
21		296276018	MOUNT HELLER MANN TITON	2	
22		156723001	CABLE TIE ANCHOR	1	
23		7000D581	DECAL - D20X22II STRIPE	1	
24		7000b119	DECAL - PATENT INDUSTRIAL	1	
25		296306059	WELDMENT - HOOD SCREEN	1	
26		285088001	HINGE - ACCESS DOOR	2	
27		282764001	WEATHER STRIP	3	
28		296306060	PANAEL - REAR ACCESS	1	
29		161503001	STUD - 1/4 TURN CAPTURED	3	
30		161504001	RETAINER - 1/4 TURN	3	
31		161505001	RECEPTACLE - SNAP IN	3	
32		161506001	WASHER - NYLON WEAR	3	
33		224616001	GROMMET-1 1/4 ID X 1/8 GROOVE	1	
34		296306055	PLATE - HYD TANK ACCESS DOOR	1	

Component-Engine Hood Fig 4-1z01r01

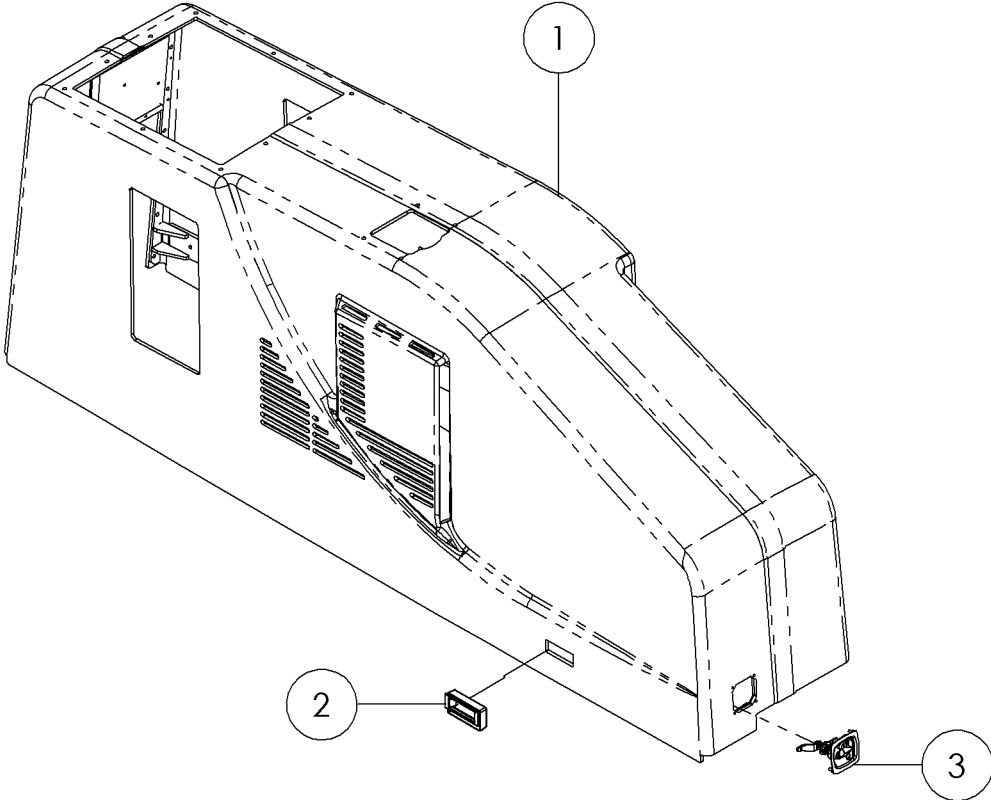


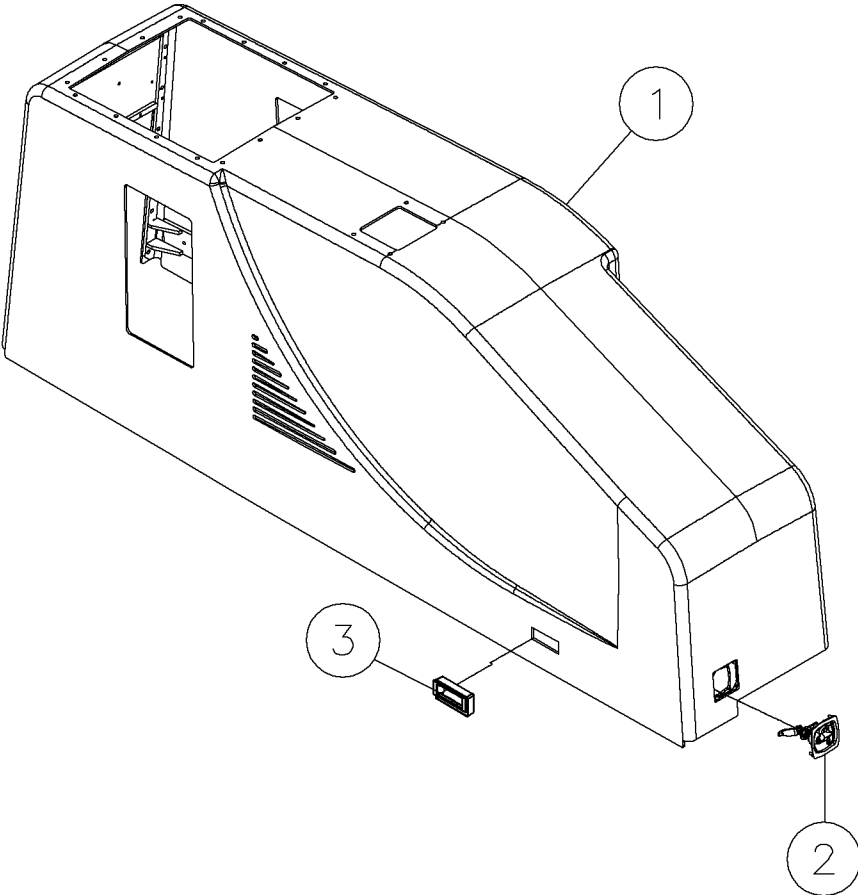
Illustration No. 296306073



## Component-Engine Hood Fig 4-1z01r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1	*	296306073	PLASTIC HOOD	1	
2		292053001	POCKET PULL	1	
3		163626492	LATCH - T-HANDLE COMP. LOCKING	1	

Component-Engine Hood Fig 4-1z01



Component-Engine Hood Fig 4-1z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284393	HOOD-D16 X 20II/D20 X 22II	1	
2		163626492	LATCH - T-HANDLE COMP. LOCKING	1	
3		292053001	POCKET PULL	1	

Hood Pivot Fig 4-2

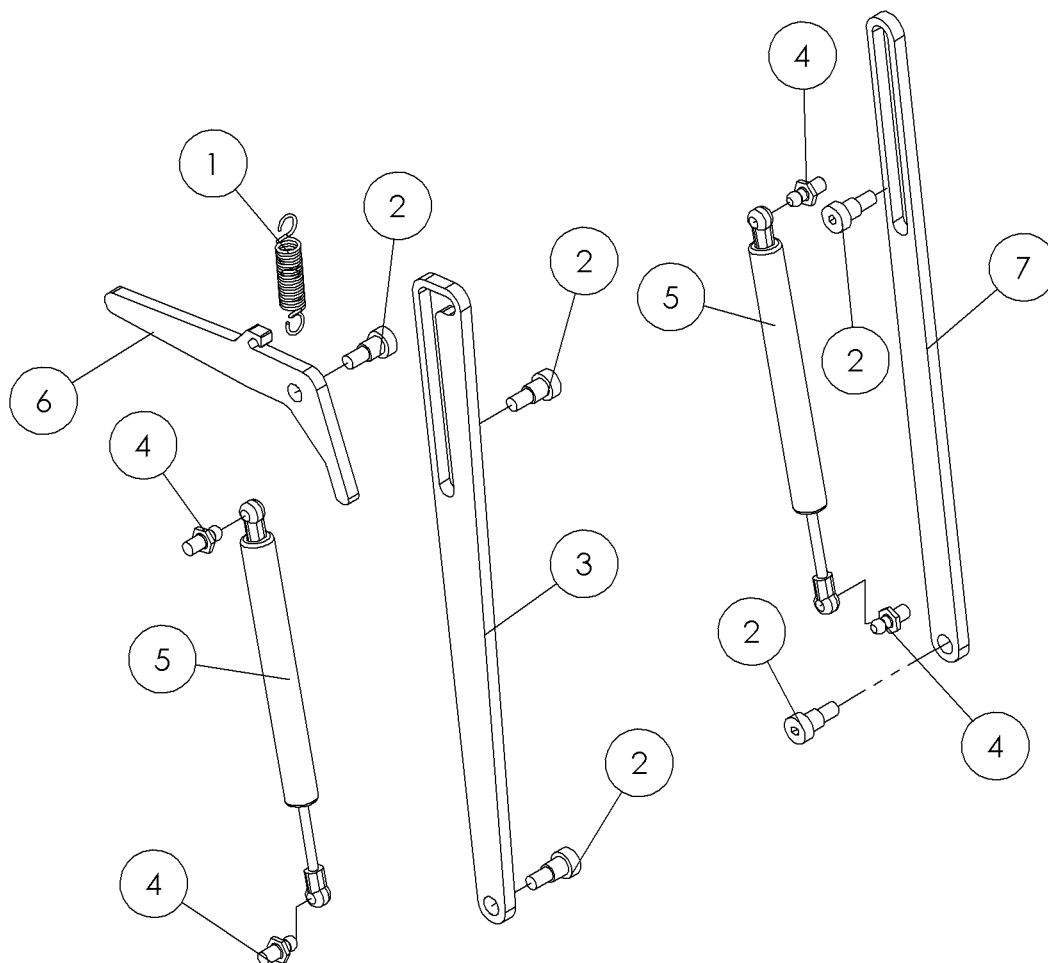


Illustration No. 296283490

## Hood Pivot Fig 4-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		235869001	SPRING-EXT. 3/4 OD X .085-3.00	1	
2		240056001	SCREW-SHSS-.50X.50-.38-16THD-CZ	5	
3		296274625	SLIDE - HOOD LOCK	1	
4		285784001	BALL - STUD	4	
5		251144001	SPRING - GAS ASSIST	2	
6		296294086	PLATE - HOOD RELEASE	1	
7		296274624	SLIDE - HOOD CATCH	1	

Engine (S/N 166-) Fig 5-1r05

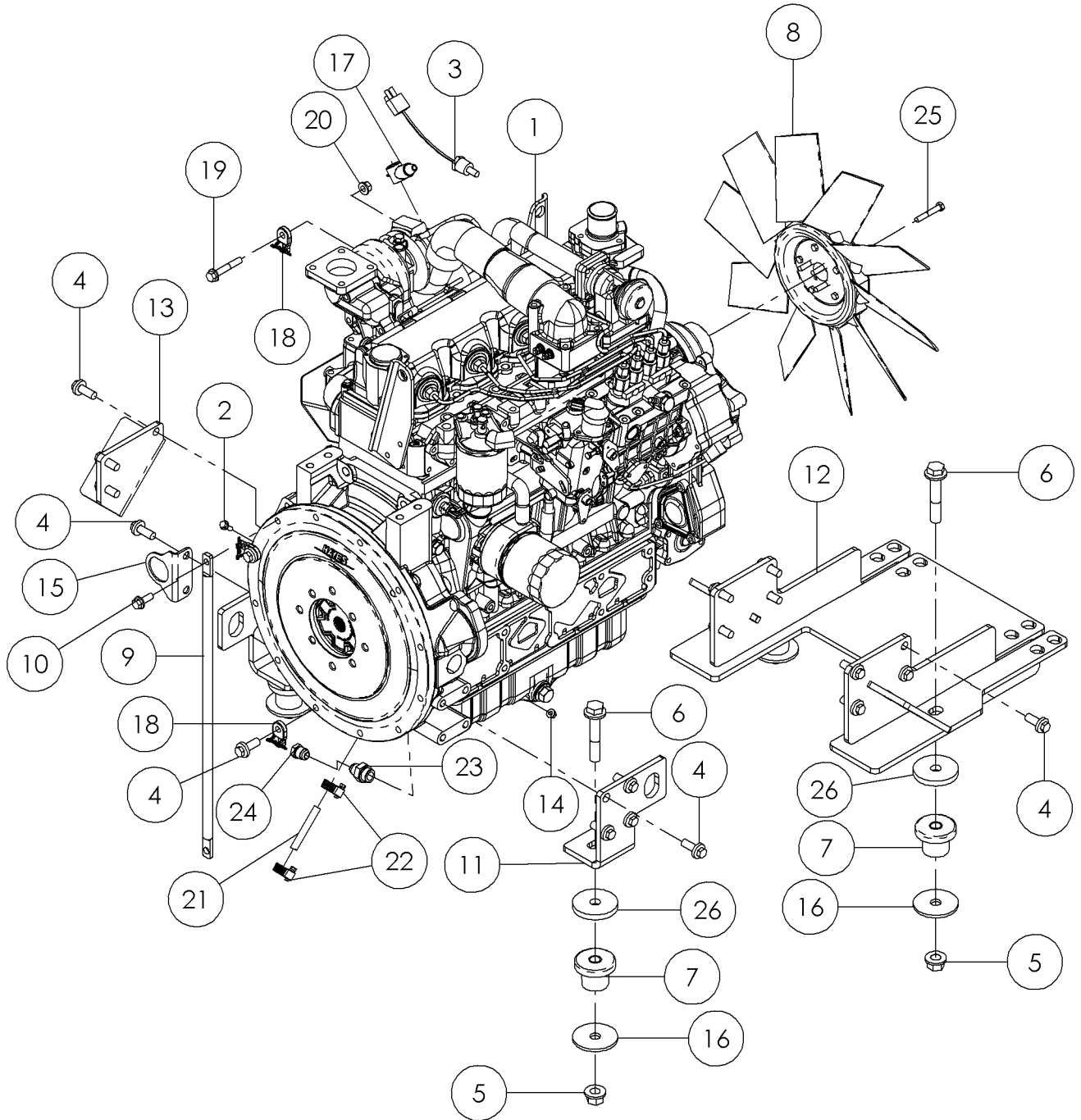


Illustration No. 296306101

## Engine (S/N 166-) Fig 5-1r05

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Update In Illustration & Parts List.
1		296306117	ENGINE - KUBOTA V3800DI-T 84HP	1	Breakdown Fig. 5-1a (S/N 166-)
2		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
3	*	296306408	SWITCH - WATER TEMPERATURE	1	
4		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	21	
5		296300852	NUT-HEXFLGTL-.63-11-G-YZ	4	
6		296300808	SCREW-HFS-.63-11X3.50-GR8-YZ	4	
7		296299136	MOUNT - M501 - 50NR	4	
8		296306125	FAN - 19" BLOWER	1	
9		292299001	CABLE - BATTERY 22" BLACK	1	
10		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
11		296293872	PLATE - REAR ENGINE MOUNT	2	
12		296306351	MOUNT - ENGINE/RADIATOR	1	
13		296294249	MOUNT - FUEL PUMP	1	
14		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
15		296296143	PLATE - BULKHEAD MOUNTING	1	
16		153863001	WASHER-FLATWRT .63-.66X2.81-.19-CZ	4	
17		261737001	BOOT - RED TERMINAL COVER (8 - 2GA)	1	
18		296276018	MOUNT HELLER MANN TITON	3	
19		296300777	SCREW-HFS-.38-16X2.50-GR8-YZ	1	
20		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
21		285520001	FUEL LINE - 5/16" X 45"	1	
22		1580003	HOSE CLAMP - 3/4"	2	
23		93395001	FITTING-M22X1.5MX8MJIC CONNECT	1	
24		83637001	PLUG-#8 JIC MALE	1	
25		506032050	SCREW-HCS,M8-1.25X50,8.8,YZ,D931,PT	4	
26		296296188	WASHER-FLTWRT-.63-.66X2.81-.38-CZ	4	

Engine (S/N 166-) Fig 5-1r04

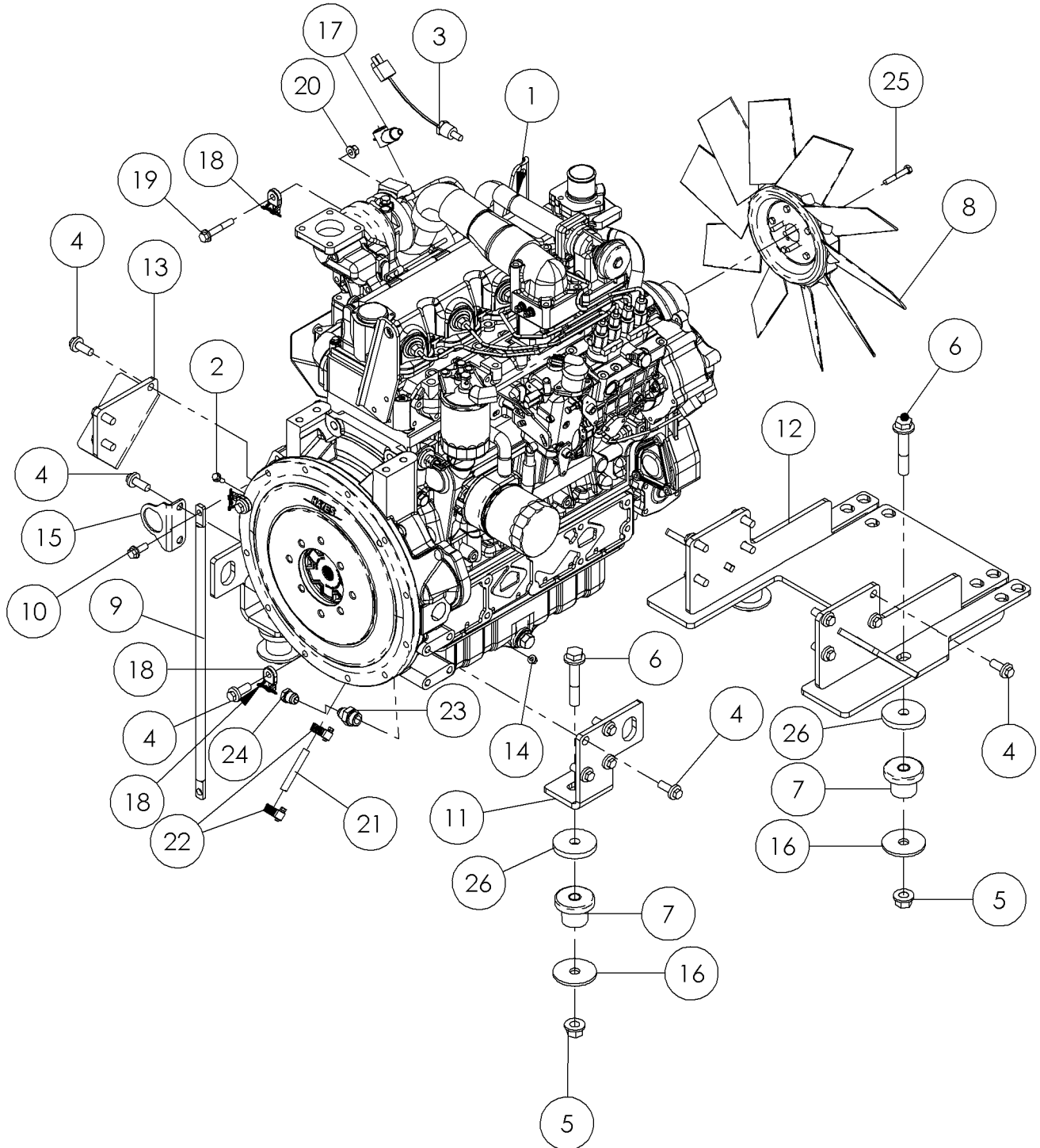


Illustration No. 296306101



## Engine (S/N 166-) Fig 5-1r04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	April, 2008		Change Fan Blower & Hardware.
1		296306117	ENGINE - KUBOTA V3800DI-T 84HP	1	Breakdown Fig. 5-1a (S/N 166-)
2		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
3		296269282	SWITCH - WATER TEMPERATUR	1	
4		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	21	
5		296300852	NUT-HEXFLGTL-.63-11-G-YZ	4	
6		296300808	SCREW-HFS-.63-11X3.50-GR8-YZ	4	
7		296299136	MOUNT - M501 - 50NR	4	
8	*	296306125	FAN - 19" BLOWER	1	
9		292299001	CABLE - BATTERY 22" BLACK	1	
10		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
11		296293872	PLATE - REAR ENGINE MOUNT	2	
12		296306351	MOUNT - ENGINE/RADIATOR	1	
13		296294249	MOUNT - FUEL PUMP	1	
14		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
15		296296143	PLATE - BULKHEAD MOUNTING	1	
16		153863001	WASHER-FLATWRT .63-.66X2.81-.19-CZ	4	
17		261737001	BOOT - RED TERMINAL COVER (8 - 2GA)	1	
18		296276018	MOUNT HELLER MANN TITON	3	
19		296300777	SCREW-HFS-.38-16X2.50-GR8-YZ	1	
20		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
21		285520001	FUEL LINE - 5/16" X 45"	1	
22		1580003	HOSE CLAMP - 3/4"	2	
23		93395001	FITTING-M22X1.5MX8MJIC CONNECT	1	
24		83637001	PLUG-#8 JIC MALE	1	
25	*	506032050	SCREW-HCS,M8-1.25X50,8.8,YZ,D931,PT	4	
26		296296188	WASHER-FLTWRT-.63-.66X2.81-.38-CZ	4	

Engine (S/N 166-) Fig 5-1r03

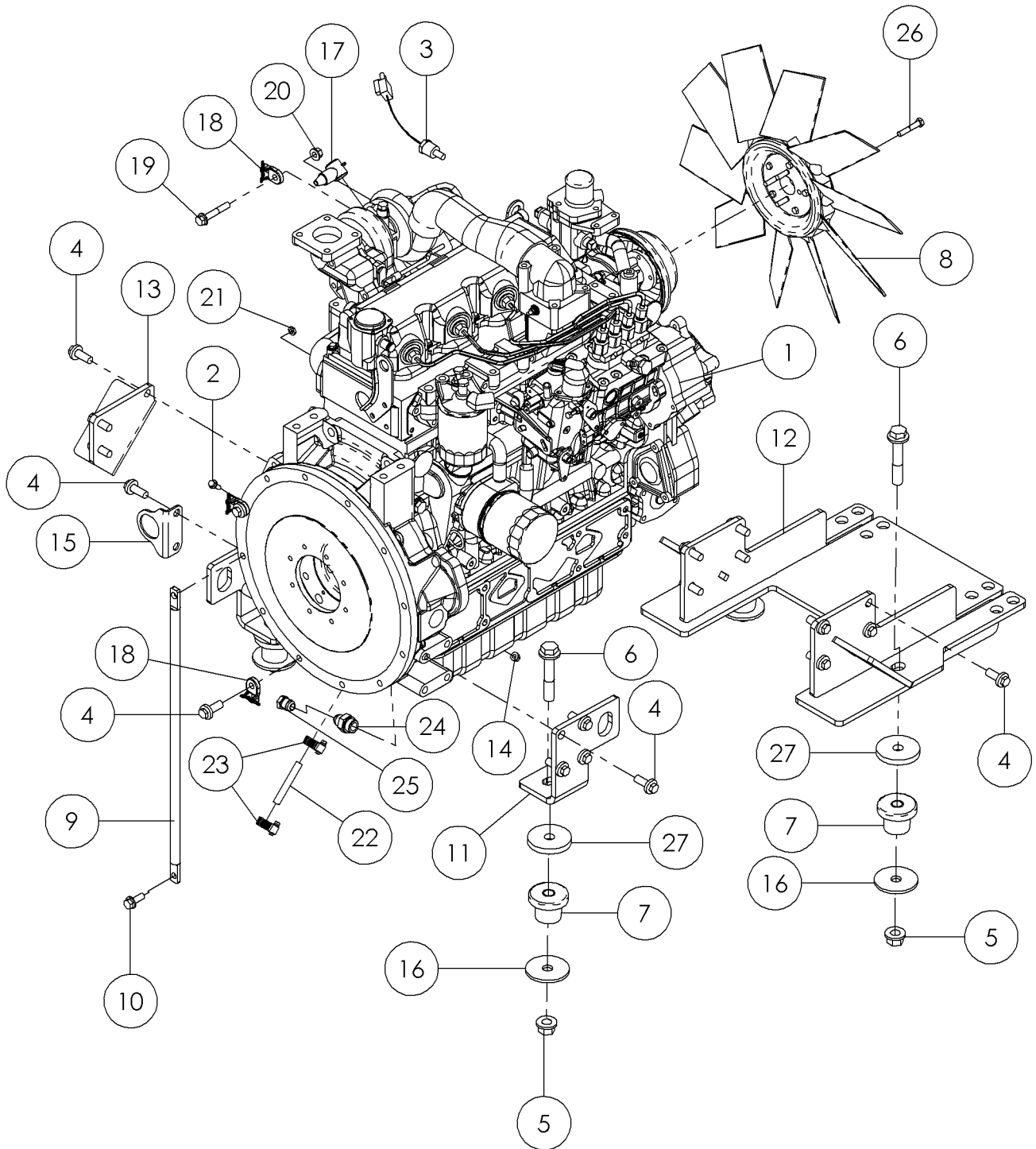


Illustration No. 296284450

## Engine (S/N 166-) Fig 5-1r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Change To Tier III engine
1	*	296306117	ENGINE - KUBOTA V3800DI-T 84HP	1	(S/N 166-) Breakdown Fig. 5-1a
2		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
3		296269282	SWITCH - WATER TEMPERATUR	1	
4		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	21	
5		296300852	NUT-HEXFLGTL-.63-11-G-YZ	4	
6		296300808	SCREW-HFS-.63-11X3.50-GR8-YZ	4	
7		296299136	MOUNT - M501 - 50NR	4	
8		296284458	FAN - 19" BLOWER	1	
9		292299001	CABLE - BATTERY 22" BLACK	1	
10		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
11		296293872	PLATE - REAR ENGINE MOUNT	2	
12		296306351	MOUNT - ENGINE/RADIATOR	1	
13		296294249	MOUNT - FUEL PUMP	1	
14		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
15		296296143	PLATE - BULKHEAD MOUNTING	1	
16		153863001	WASHER-FLATWRT .63-.66X2.81-.19-CZ	4	
17		261737001	BOOT - RED TERMINAL COVER (8 - 2GA)	1	
18		296276018	MOUNT HELLER MANN TITON	3	
19		296300777	SCREW-HFS-.38-16X2.50-GR8-YZ	1	
20		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
21		285520001	FUEL LINE - 5/16" X 45"	1	
22		1580003	HOSE CLAMP - 3/4"	2	
23		93395001	FITTING-M22X1.5MX8MJIC CONNECT	1	
24		83637001	PLUG-#8 JIC MALE	1	
25		506032025	SCREW-HCS,M8-1.25X25,8.8,YZ,D933,FT	4	
26		296296188	WASHER-FLTWRT-.63-.66X2.81-.38-CZ	4	

Engine (S/N 136-165) Fig 5-1r02

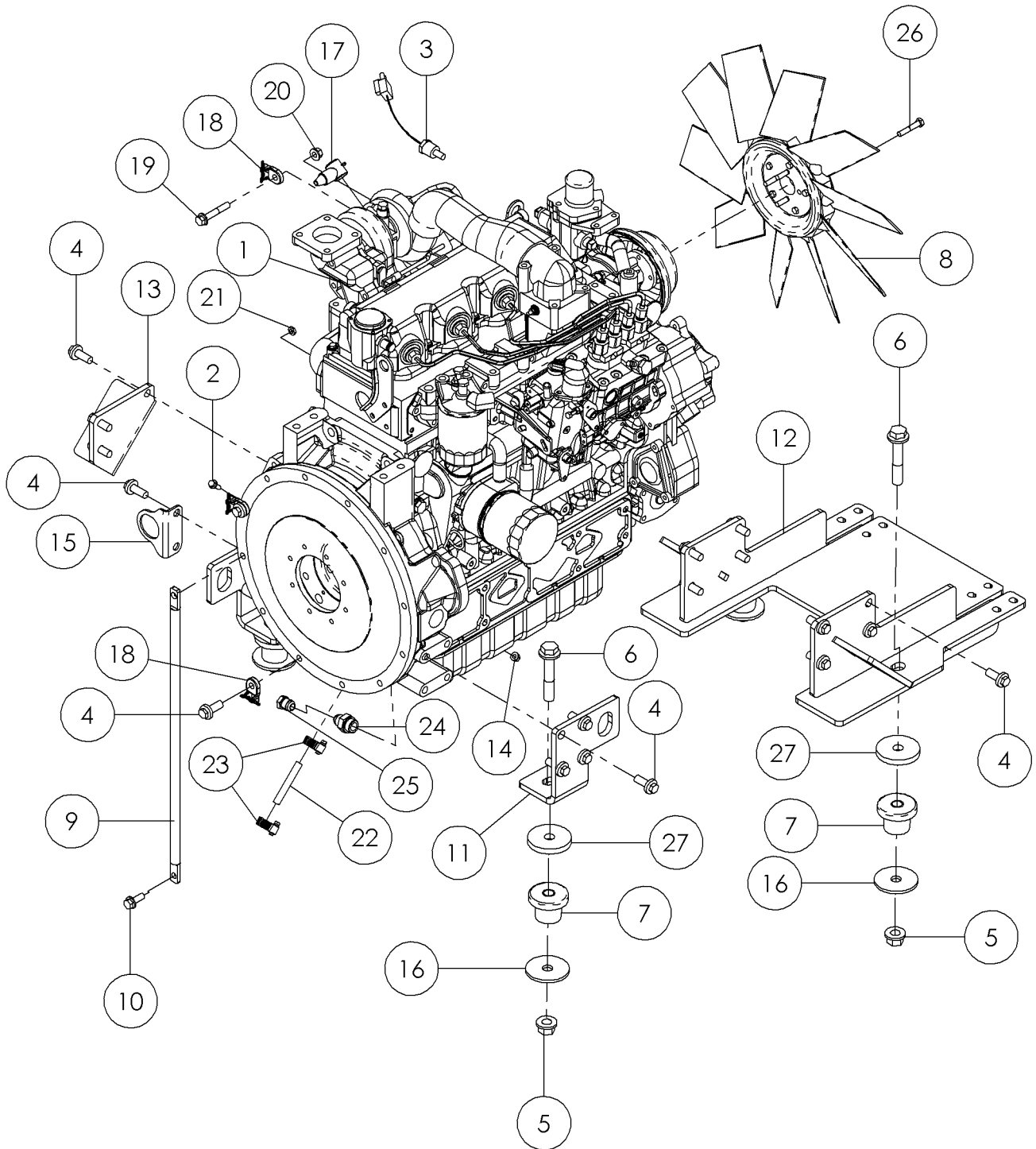


Illustration No. 296284450

## Engine (S/N 136-165) Fig 5-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		296284430	ENGINE - KUBOTA 84HP	1	Breakdown Fig. 5-1a
2		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
3		296269282	SWITCH - WATER TEMPERATUR	1	
4		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	21	
5		296300852	NUT-HEXFLGTL-.63-11-G-YZ	4	
6		296300808	SCREW-HFS-.63-11X3.50-GR8-YZ	4	
7		296299136	MOUNT - M501 - 50NR	4	
8		296306002	FAN-19" BLOWER 40DEG PITCH	1	
9		292299001	CABLE - BATTERY 22" BLACK	1	
10		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
11		296293872	PLATE - REAR ENGINE MOUNT	2	
12		296293871	MOUNT - ENGINE/RADIATOR	1	
13		296294249	MOUNT - FUEL PUMP	1	
14		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
15		296296143	PLATE - BULKHEAD MOUNTING	1	
16		153863001	WASHER-FLATWRT .63-.66X2.81-.19-CZ	4	
17		261737001	BOOT - RED TERMINAL COVER (8 - 2GA)	1	
18		296276018	MOUNT HELLER MANN TITON	3	
19		296300777	SCREW-HFS-.38-16X2.50-GR8-YZ	1	
20		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
21		506042008	NUT-HEX,JAM,M8 -1.25,YZ,D439	1	
22		285520001	FUEL LINE - 5/16" X 45"	1	
23		1580003	HOSE CLAMP - 3/4"	2	
24		93395001	FITTING-M22X1.5MX8MJIC CONNECT	1	
25		83637001	PLUG-#8 JIC MALE	1	
26		506032045	SCREW-HCS,M8-1.25X45,8.8,YZ,D931,PT	4	
27	*	296296188	WASHER-FLTWRT-.63-.66X2.81-.38-CZ	4	(SN 136-)

Engine (S/N 101-135) Fig 5-1r01

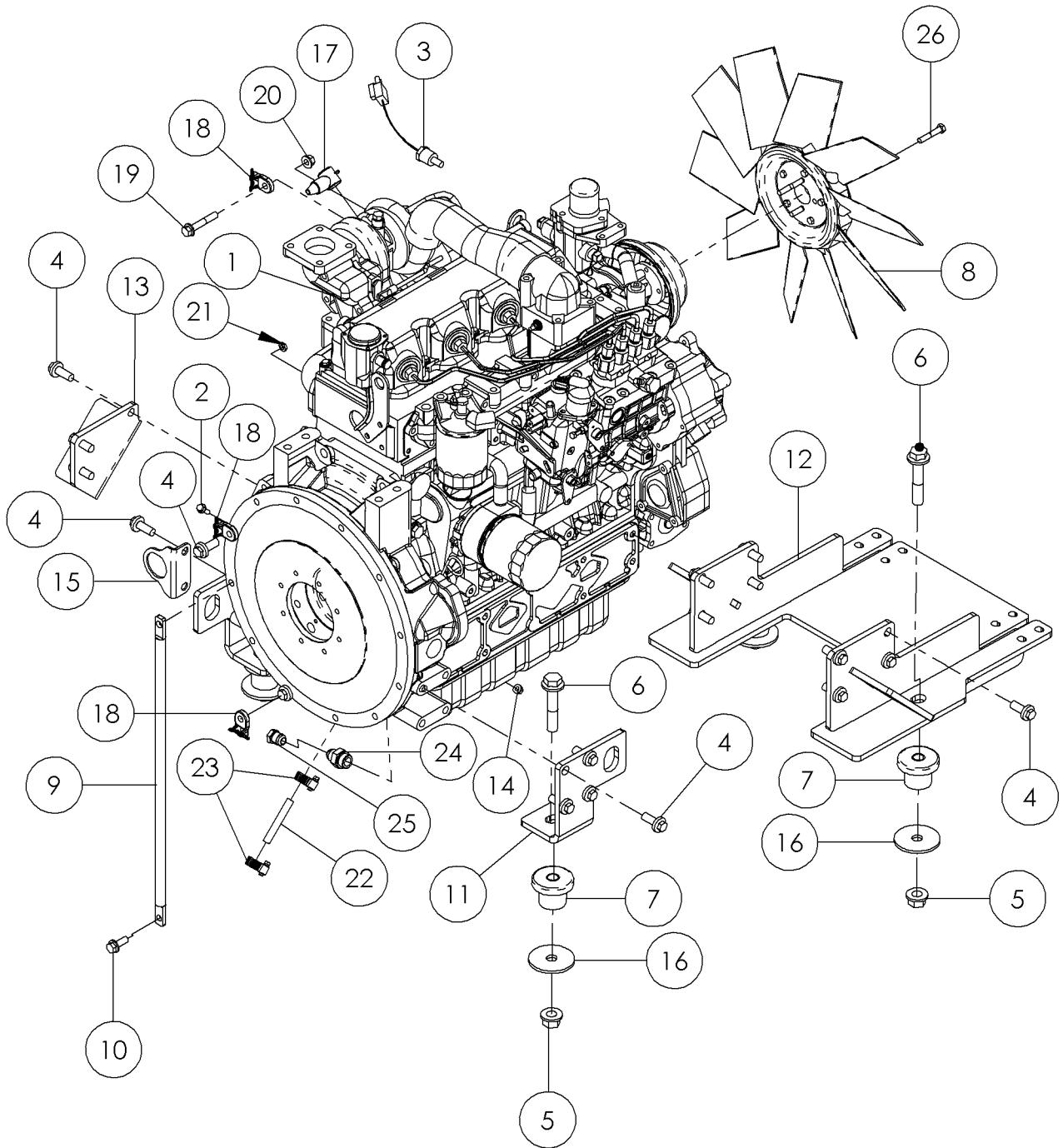


Illustration No. 296284450

## Engine (S/N 101-135) Fig 5-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Add Mount
1		296284430	ENGINE - KUBOTA 84HP	1	Breakdown Fig. 5-1a
2		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
3		296269282	SWITCH - WATER TEMPERATUR	1	
4		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	21	
5		296300852	NUT-HEXFLGTL-.63-11-G-YZ	4	
6		296300807	SCREW-HFS-.63-11X3.25-GR8-YZ	4	
7	*	296299136	MOUNT - M501 - 50NR	4	
8		296306002	FAN-19" BLOWER 40DEG PITCH	1	
9		292299001	CABLE - BATTERY 22" BLACK	1	
10		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
11		296293872	PLATE - REAR ENGINE MOUNT	2	
12		296293871	MOUNT - ENGINE/RADIATOR	1	
13		296294249	MOUNT - FUEL PUMP	1	
14		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
15		296296143	PLATE - BULKHEAD MOUNTING	1	
16		153863001	WASHER-FLATWRT .63-.66X2.81-.19-CZ	4	
17		261737001	BOOT - RED TERMINAL COVER (8 - 2GA)	1	
18		296276018	MOUNT HELLER MANN TITON	3	
19		296300777	SCREW-HFS-.38-16X2.50-GR8-YZ	1	
20		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
21		506042008	NUT-HEX,JAM,M8 -1.25,YZ,D439	1	
22		285520001	FUEL LINE - 5/16" X 45"	1	
23		1580003	HOSE CLAMP - 3/4"	2	
24		93395001	FITTING-M22X1.5MX8MJIC CONNECT	1	
25		83637001	PLUG-#8 JIC MALE	1	
26		506032045	SCREW-HCS,M8-1.25X45,8.8,YZ,D931,PT	4	

Engine Fig 5-1

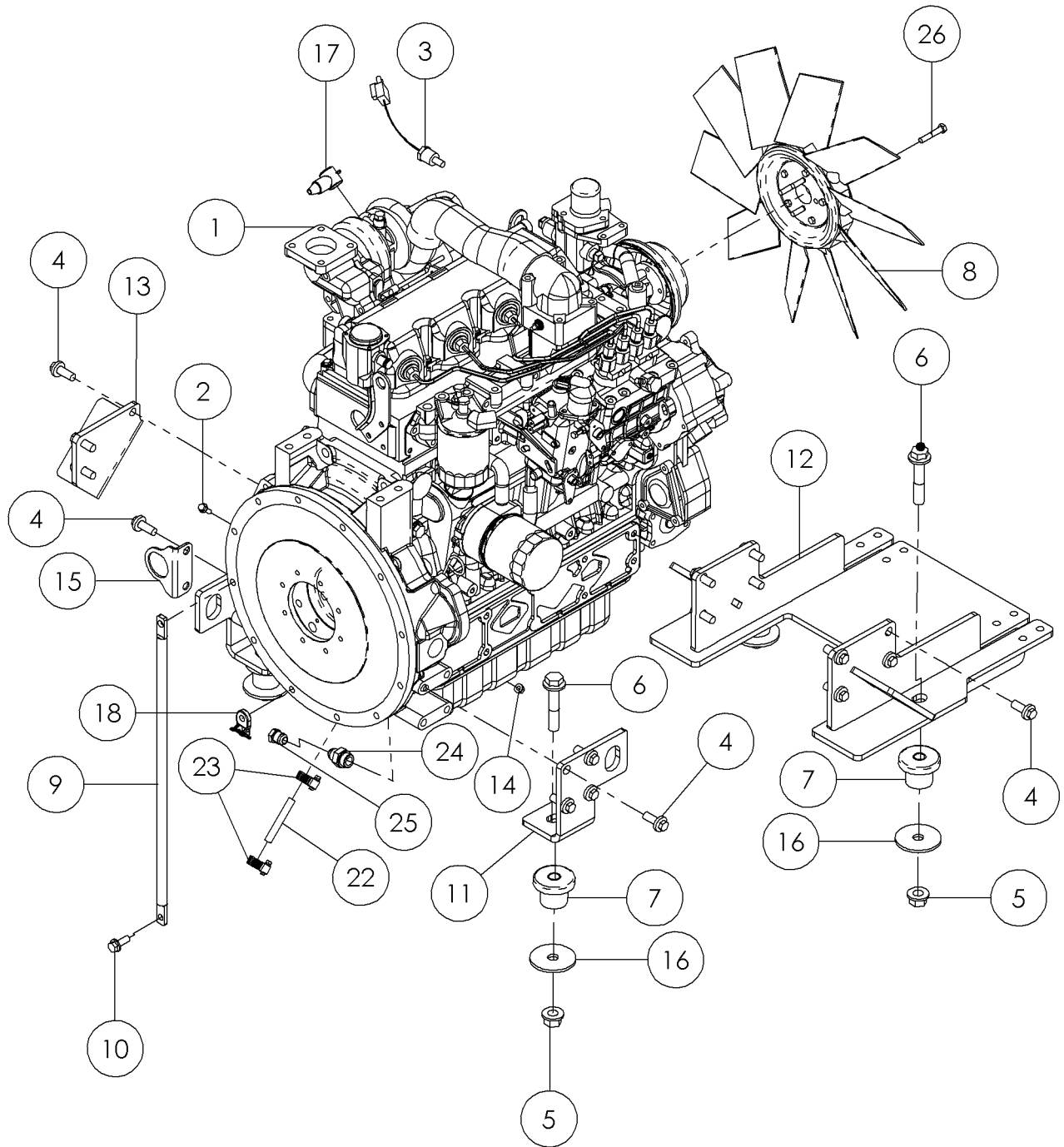


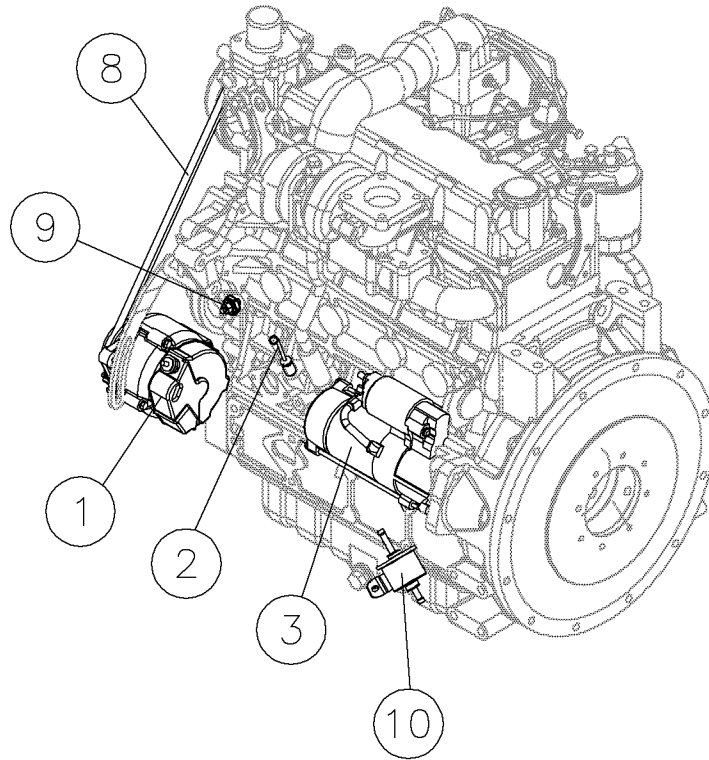
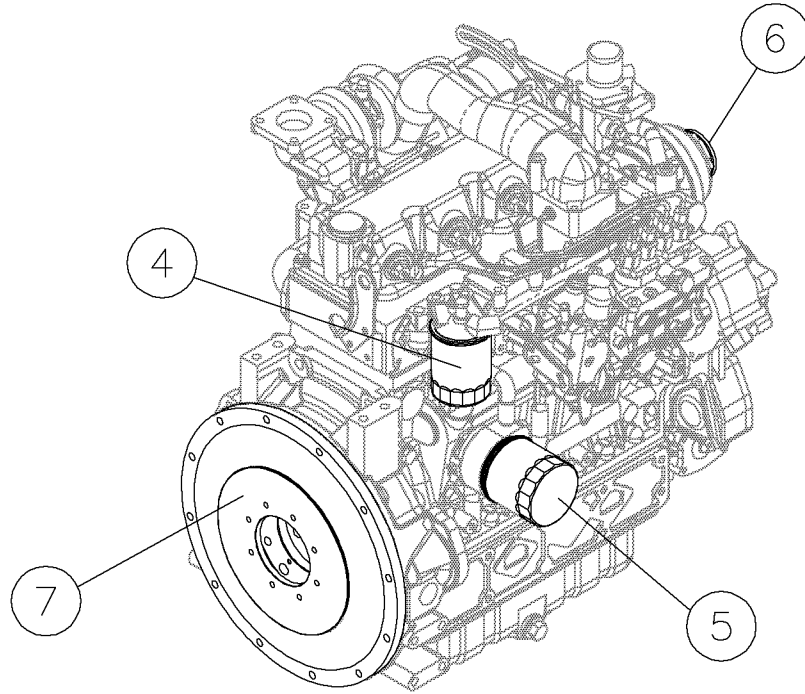
Illustration No. 296284450



## Engine Fig 5-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284430	ENGINE - KUBOTA 84HP	1	Breakdown Fig. 5-1a
2		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
3		296269282	SWITCH - WATER TEMPERATUR	1	
4		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	19	
5		296300852	NUT-HEXFLGTL-.63-11-G-YZ	4	
6		296300807	SCREW-HFS-.63-11X3.25-GR8-YZ	4	
7		2607001	MOUNT - M501-70NR	4	
8		296306002	FAN-19" BLOWER 40DEG PITCH	1	
9		292299001	CABLE - BATTERY 22" BLACK	1	
10		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
11		296293872	PLATE - REAR ENGINE MOUNT	2	
12		296293871	MOUNT - ENGINE/RADIATOR	1	
13		296294249	MOUNT - FUEL PUMP	1	
14		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
15		296296143	PLATE - BULKHEAD MOUNTING	1	
16		153863001	WASHER-FLATWRT .63-.66X2.81-.19-CZ	4	
17		261737001	BOOT - RED TERMINAL COVER (8 - 2GA)	1	
18		296276018	MOUNT HELLER MANN TITON	2	
19		296300777	SCREW-HFS-.38-16X2.50-GR8-YZ	1	
20		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
21		506042008	NUT-HEX,JAM,M8 -1.25,YZ,D439	1	
22		285520001	FUEL LINE - 5/16" X 45"	1	
23		1580003	HOSE CLAMP - 3/4"	2	
24		93395001	FITTING-M22X1.5MX8MJIC CONNECT	1	
25		83637001	PLUG-#8 JIC MALE	1	
26		506032045	SCREW-HCS,M8-1.25X45,8.8,YZ,D931,PT	4	

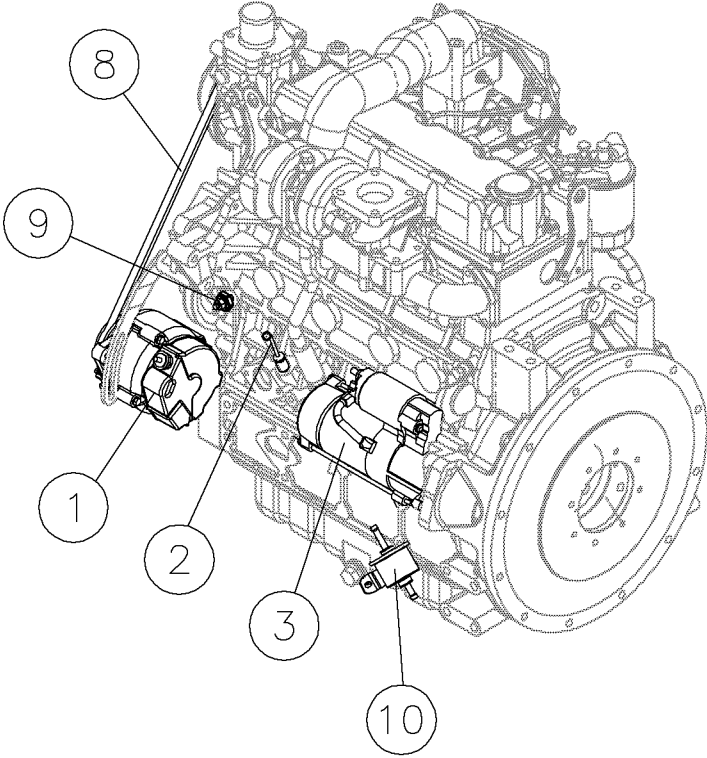
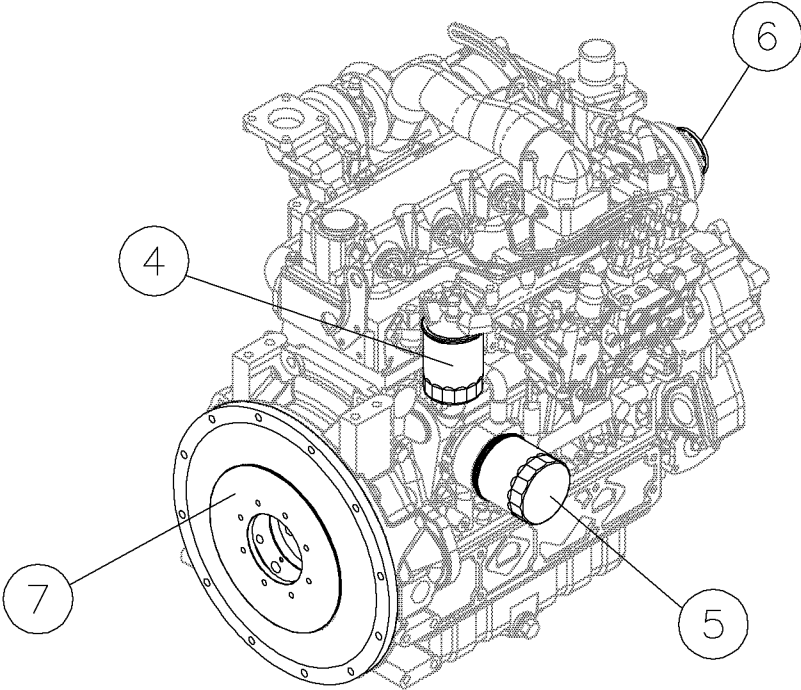
Components-Engine Fig 5-1z01r01



## Components-Engine Fig 5-1z01r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Correct B.O.M.
1		296302384	ALTERNATOR	1	
2		296302383	DIPSTICK	1	
3		296302381	STARTER	1	
4		81831	FILTER,FUEL,TURNER,481	1	
5		296302380	OIL FILTER	1	
6		296302379	WATER PUMP	1	
7		296302398	PUMP DRIVE ASSY	1	
		296302397	FLYWHEEL HOUSING	1	
8		296302385	FAN BELT	1	
9		8E66320958	ENGINE OIL PRESSURE SWITCH	1	
10		296271098	ELECTRIC FUEL PUMP	1	
	*	296306117	ENGINE - KUBOTA V3800DI-T 84HP		(S/N 166-) Inc. All Items In Figure.

Components-Engine Fig 5-1z01



## Components-Engine Fig 5-1z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Correct B.O.M.
1		296302384	ALTERNATOR	1	
2		296302383	DIPSTICK	1	
3		296302381	STARTER	1	
4		81831	FILTER,FUEL,TURNER,481	1	
5		296302380	OIL FILTER	1	
6		296302379	WATER PUMP	1	
7		296302398	PUMP DRIVE ASSY	1	
		296302397	FLYWHEEL HOUSING	1	
8		296302385	FAN BELT	1	
9		8E66320958	ENGINE OIL PRESSURE SWITCH	1	
10		296271098	ELECTRIC FUEL PUMP	1	
		296284430	ENGINE - KUBOTA 84HP		Inc. All Items In Figure.

Air Cleaner (S/N 166-) Fig 5-2r03

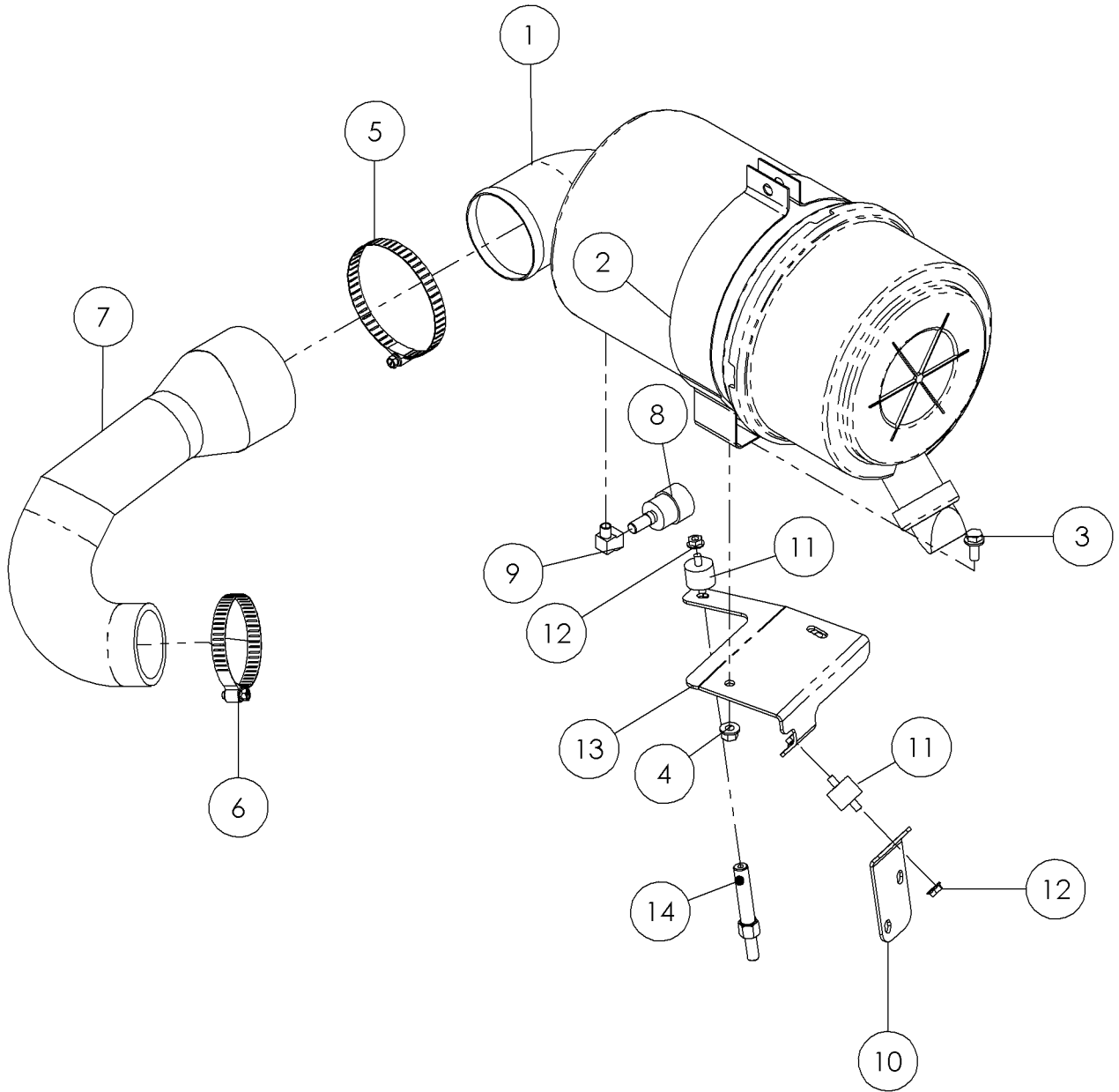


Illustration No. 296284447

## Air Cleaner (S/N 166-) Fig 5-2r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	July, 2008		Change Mount
1		224847001	AIR CLEANER	1	
2		220167001	METAL MOUNTING BAND	1	
3		296300762	SCREW-HFS-.31-18X.75-GR8-YZ	2	
4		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	
5		1580019	HOSE CLAMP - 4 1/2"	1	
6		1580015	HOSE CLAMP - 3"	1	
7		296281239	HOSE - AIR INLET	1	
8		2165001	INDICATOR - RAX00-2352	1	
9		4017001	FITTING-3400 X 2 WTHR-HD	1	
10		296296189	MOUNT - ENGINE/AIR CLEANER D20X22II	1	
11	*	91306001	MOUNT-SANDWICH DOUBLE STUD	2	
12		296300891	NUT-HEXFLG-.25-20-GR8-YZ	3	
13		296296190	MOUNT - AIR CLEANER D16X20II & D20X22II	1	
14		296296194	BAR - AIR CLEANER SUPPORT	1	

Air Cleaner (S/N 157-165) Fig 5-2r02

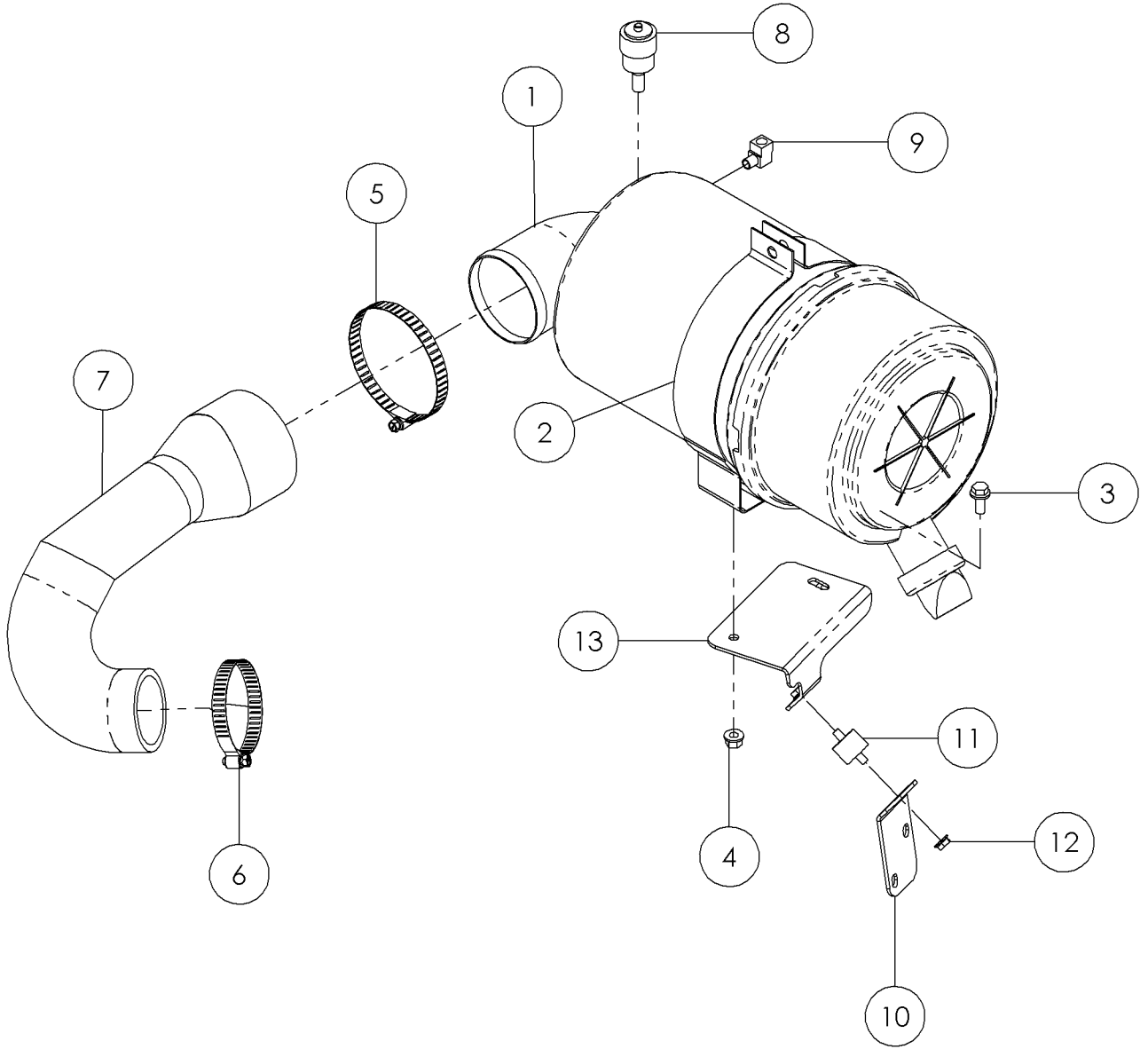


Illustration No. 296284447



## Air Cleaner (S/N 157-165) Fig 5-2r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		224847001	AIR CLEANER	1	Breakdown Fig. 5-2a
2		220167001	CLAMP-AIR CLEANER H00-2023	1	
3		296300762	SCREW-HFS-.31-18X.75-GR8-YZ	2	
4		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	
5		1580019	HOSE CLAMP - 4 1/2"	1	
6		1580015	HOSE CLAMP - 3"	1	
7		296281239	HOSE - AIR INLET	1	
8		2165001	INDICATOR - RAX00-2352	1	
9		4017001	FITTING-3400 X 2 WTHR-HD	1	
10	*	296296189	MOUNT - ENGINE/AIR CLEANER D20X22II	1	(SN 157- )
11	*	122372001	MOUNT-ISOLATOR DOUBLE STUD	1	
12	*	296300891	NUT-HEXFLG-.25-20-GR8-YZ	2	
13	*	296296190	MOUNT - AIR CLEANER D16X20II & D20X22II	1	(SN 157- )

Air Cleaner (S/N 101-156) Fig 5-2r01

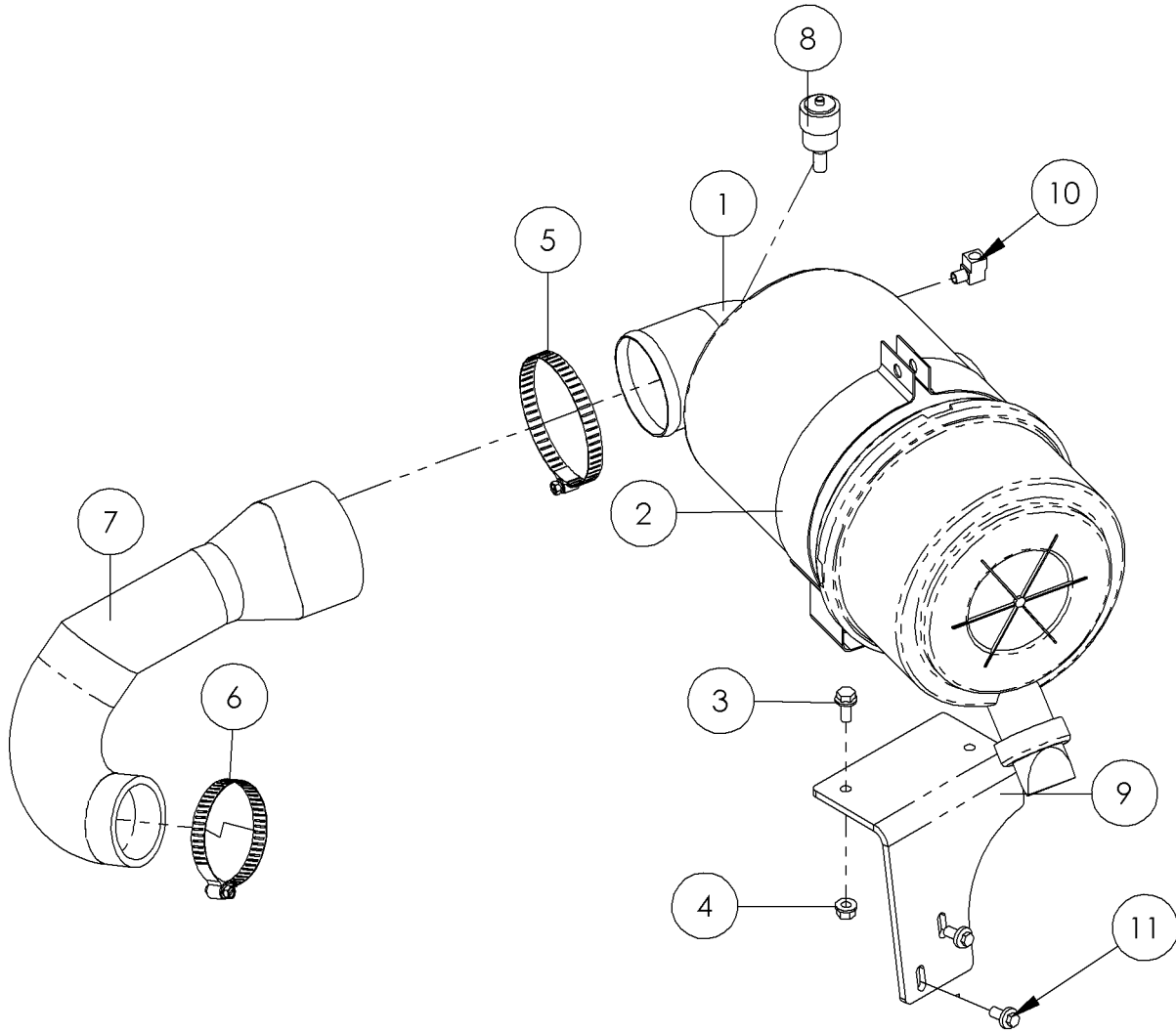


Illustration No. 296284447

## Air Cleaner (S/N 101-156) Fig 5-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Change Screws
1		224847001	AIR CLEANER	1	Breakdown Fig. 5-2a
2		220167001	CLAMP-AIR CLEANER H00-2023	1	
3		296300762	SCREW-HFS-.31-18X.75-GR8-YZ	2	
4		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	
5		1580019	HOSE CLAMP - 4 1/2"	1	
6		1580015	HOSE CLAMP - 3"	1	
7		296281239	HOSE - AIR INLET	1	
8		2165001	INDICATOR - RAX00-2352	1	
9		296306052	PLATE - AIR CLEANER MOUNT	1	
10		4017001	FITTING-3400 X 2 WTHR-HD	1	
11	*	507611016	SCREW-HFS,M8-1.25X16,10.9,YZ,D6921,FT	2	

Air Cleaner Fig 5-2

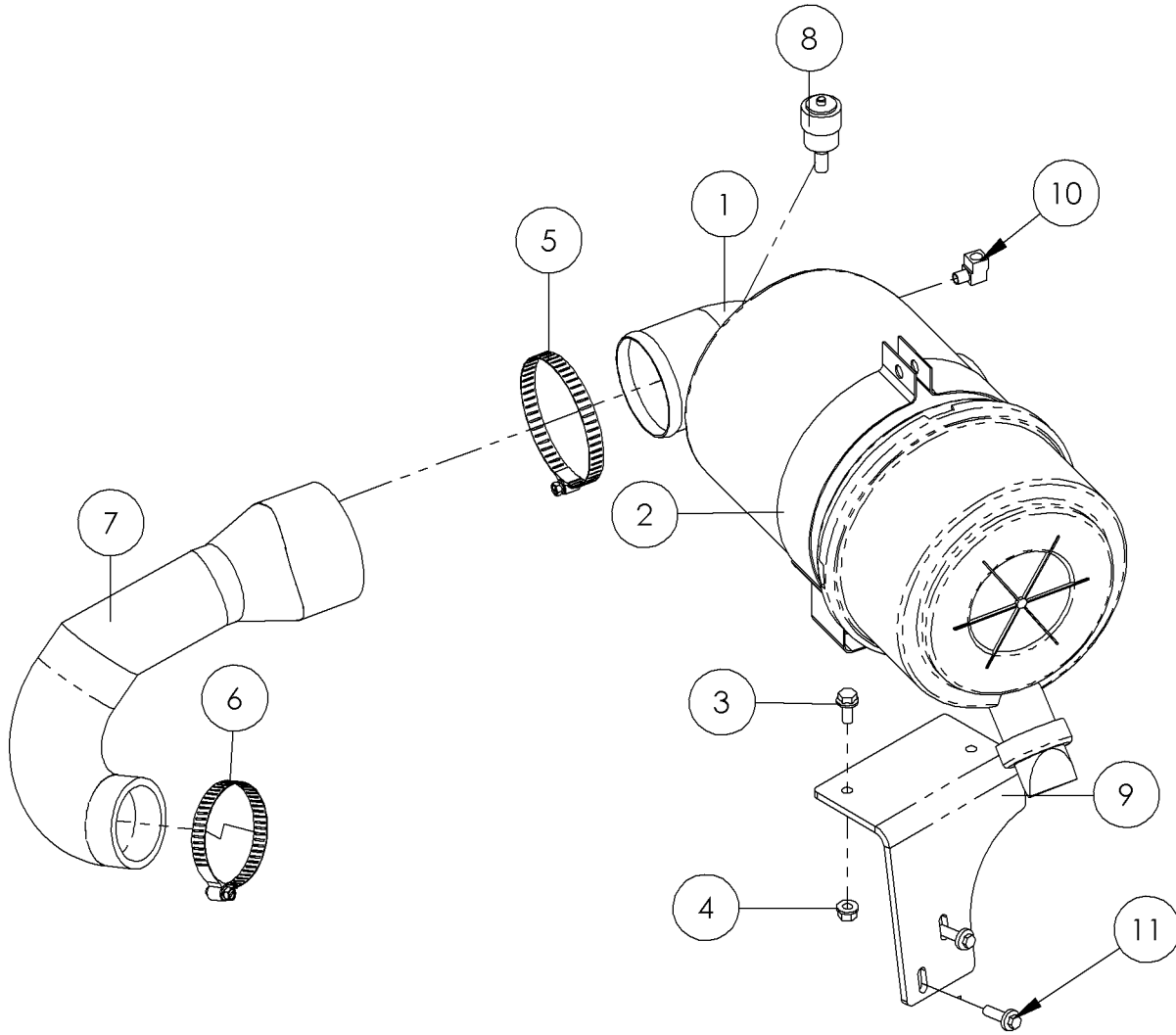
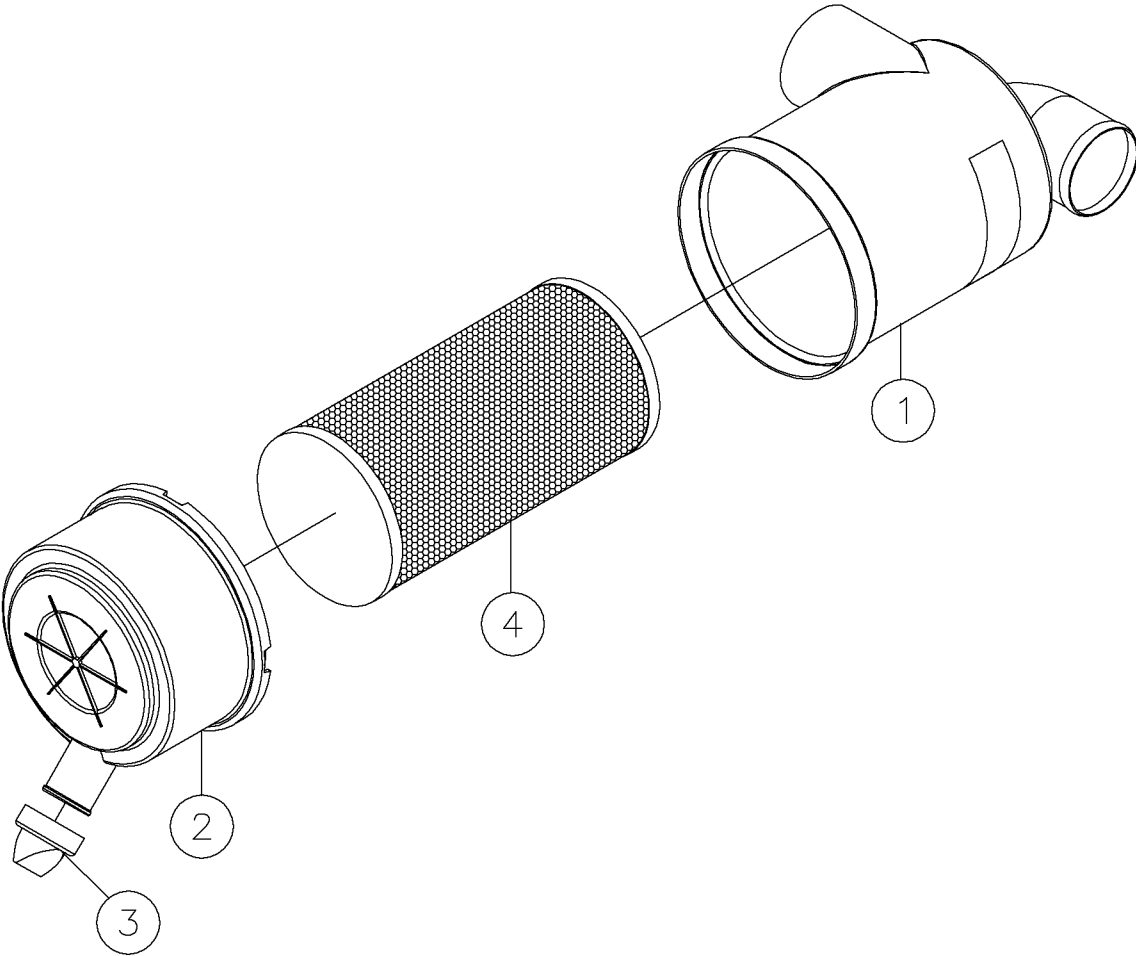


Illustration No. 296284447

## Air Cleaner Fig 5-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		224847001	AIR CLEANER	1	Breakdown Fig. 5-2a
2		220167001	CLAMP-AIR CLEANER H00-2023	1	
3		296300762	SCREW-HFS-.31-18X.75-GR8-YZ	2	
4		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	
5		1580019	HOSE CLAMP - 4 1/2"	1	
6		1580015	HOSE CLAMP - 3"	1	
7		296281239	HOSE - AIR INLET	1	
8		2165001	INDICATOR - RAX00-2352	1	
9		296306052	PLATE - AIR CLEANER MOUNT	1	
10		4017001	FITTING-3400 X 2 WTHR-HD	1	
11		507611025	SCREW-HFS,M8-1.25X25,10.9,YZ,D6921,FT	2	

Components-Air Cleaner Fig 5-2z01



## Components-Air Cleaner Fig 5-2z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		224847003	BODY ASSEMBLY	1	
2		220166007	COVER ASSEMBLY	1	
3		220166009	VALVE	1	
4		220166005	ELEMENT ASSEMBLY	1	
		224847001	AIR CLEANER	1	Inc. All Items In Figure.

Fuel Tank Fig 5-3r02

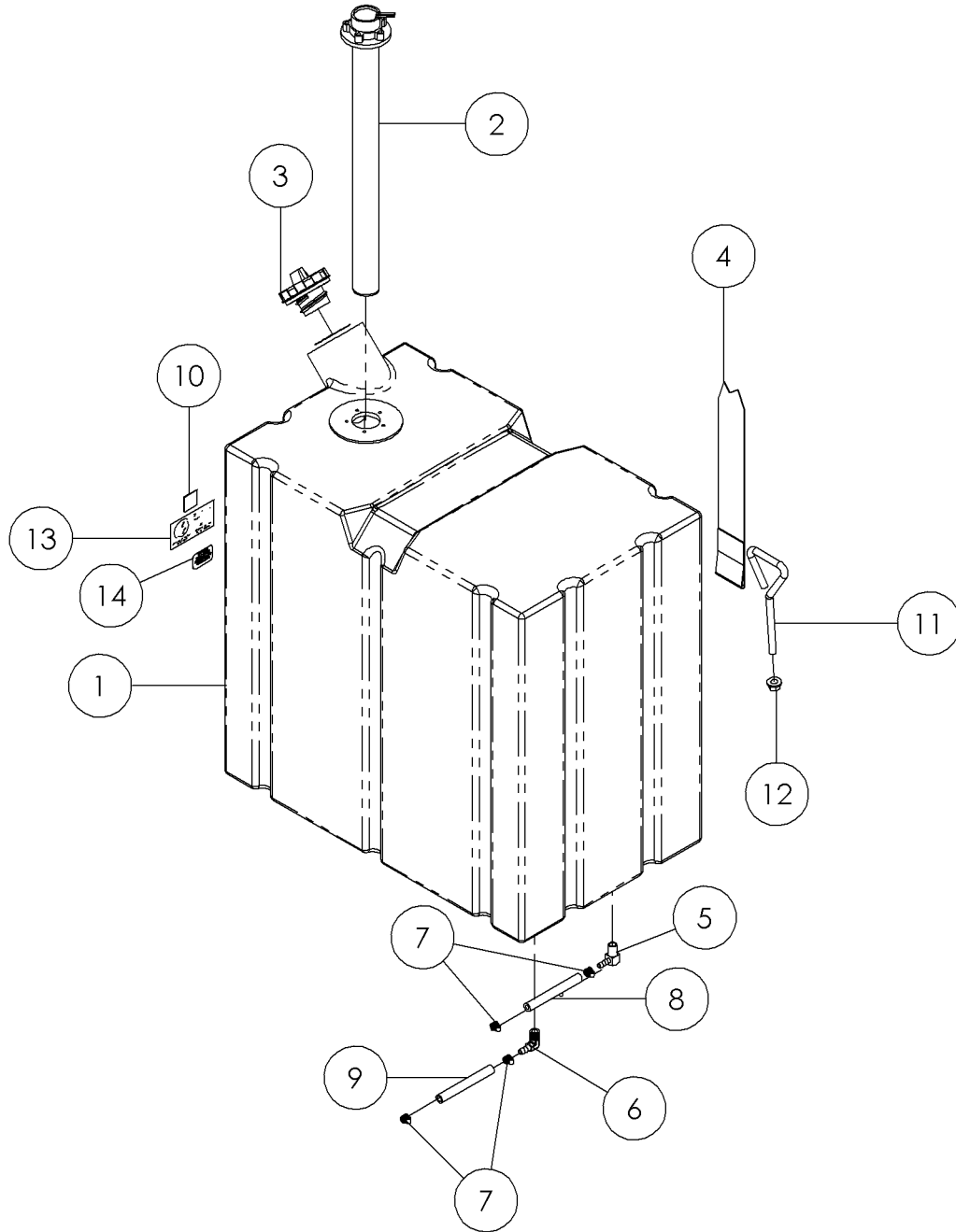


Illustration No. 296291766



## Fuel Tank Fig 5-3r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	April, 2008		Add Decal
1		296260388	TANK - 25 GALLON FUEL	1	
2		292038001	SENDER - FUEL LEVEL	1	
3		279326001	CAP - DIESEL FUEL W/LOCK	1	
4		296270843	STRAP - TANK - NYLON - 2.0" X 44.0"	1	
5		608118001	FITTING-1/4NPTX1/4HOSE BARB90	1	
6		602037001	FITTING -1/4 PIPE 5/16 BARB 90	1	
7		1580001	HOSE CLAMP - 3/8"	4	
8		296293957	HOSE - 1/4 FUEL LINE (100")	1	
9		296293956	HOSE - 5/16 FUEL LINE (100")	1	
10		7000I098	DECAL-DIESEL FUEL	1	International
		70000098	DECAL-DIESEL (AT/UND)	1	Domestic
11		903862001	BOLT-WATER TANK HOLD DOWN	1	
12		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
13		2326324	DECAL-WARNING/REFUEL	1	Domestic
		2326I324	DECAL - WARNING EXPLOSION	1	International
14	*	7000D814	DECAL - DIESEL FUEL SPECIFICATION	1	

Fuel Tank Fig 5-3r01

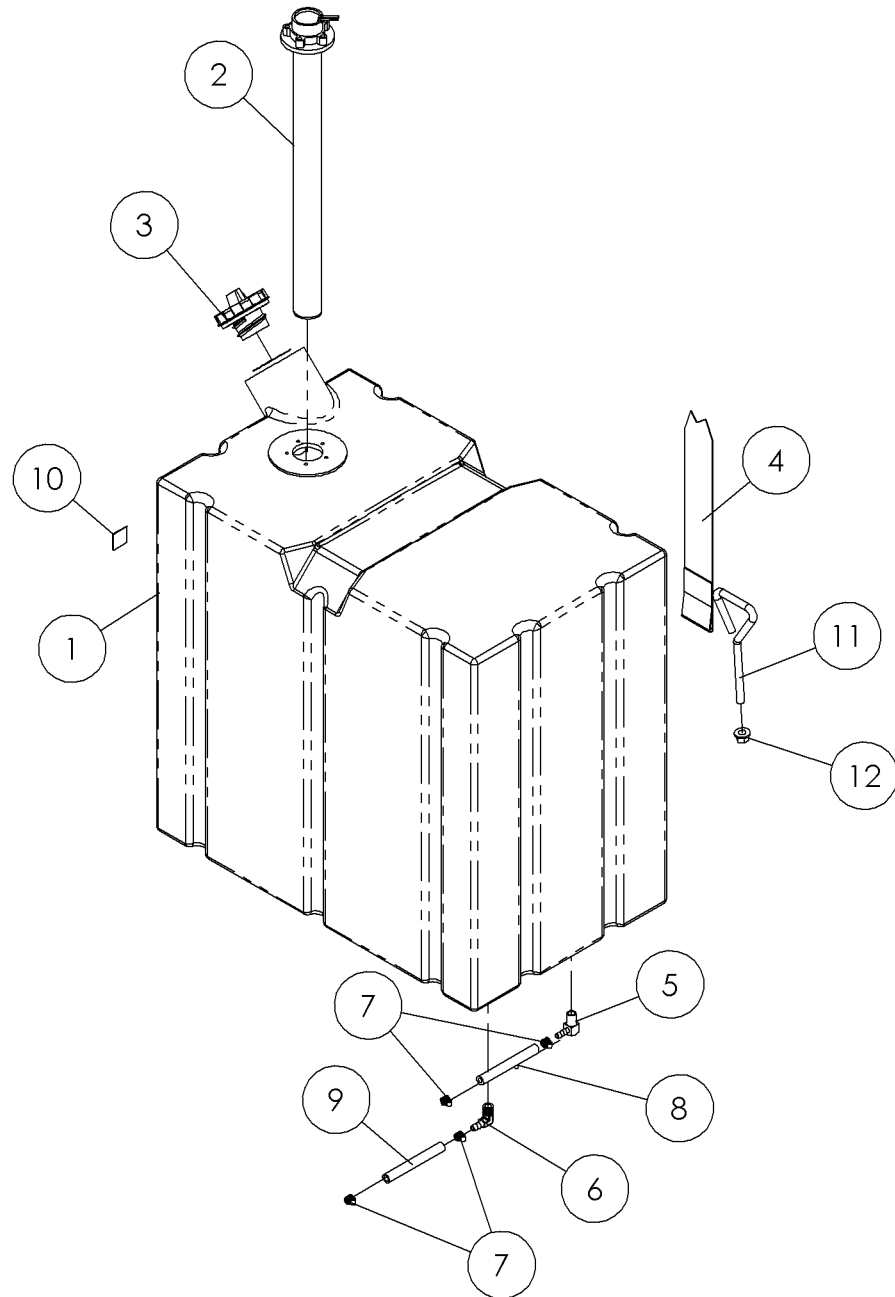


Illustration No. 296291766

## Fuel Tank Fig 5-3r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1		296260388	TANK - 25 GALLON FUEL	1	
2		292038001	SENDER - FUEL LEVEL	1	
3		279326001	CAP - DIESEL FUEL W/LOCK	1	
4	*	296270843	STRAP - TANK - NYLON - 2.0" X 44.0"	1	
5		608118001	FITTING-1/4NPTX1/4HOSE BARB90	1	
6		602037001	FITTING -1/4 PIPE 5/16 BARB 90	1	
7		1580001	HOSE CLAMP - 3/8"	4	
8		296293957	HOSE - 1/4 FUEL LINE (100")	1	
9		296293956	HOSE - 5/16 FUEL LINE (100")	1	
10		7000i098	DECAL-DIESEL FUEL	1	
11		903862001	BOLT-WATER TANK HOLD DOWN	1	
12		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	

Fuel Tank Fig 5-3

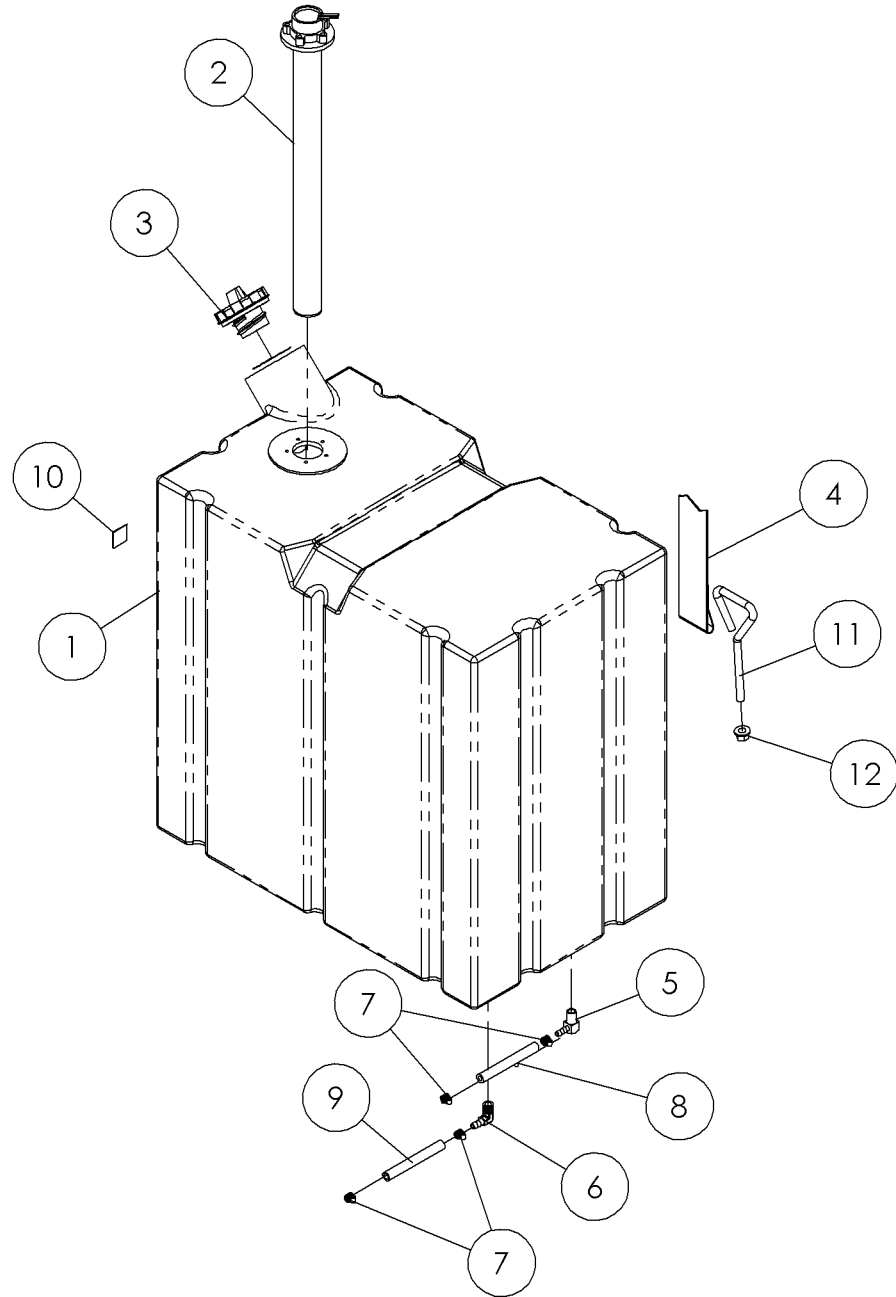


Illustration No. 296291766

## Fuel Tank Fig 5-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296260388	TANK - 25 GALLON FUEL	1	
2		292038001	SENDER - FUEL LEVEL	1	
3		279326001	CAP - DIESEL FUEL W/LOCK	1	
		296263412	KEYS (PAIR)	1	Inc. Two Keys
4		287697001	STRAP - 2 X 73.5 TANK	1	
5		608118001	FITTING-1/4NPTX1/4HOSE BARB90	1	
6		602037001	FITTING -1/4 PIPE 5/16 BARB 90	1	
7		1580001	HOSE CLAMP - 3/8"	4	
8		296293957	HOSE - 1/4 FUEL LINE (100")	1	
9		296293956	HOSE - 5/16 FUEL LINE (100")	1	
10		7000I098	DECAL-DIESEL FUEL	1	International
		70000098	DECAL-DIESEL (AT/UND)	1	Domestic
11		903862001	BOLT-WATER TANK HOLD DOWN	1	
12		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	

Muffler (S/N 166-) Fig 5-4r02

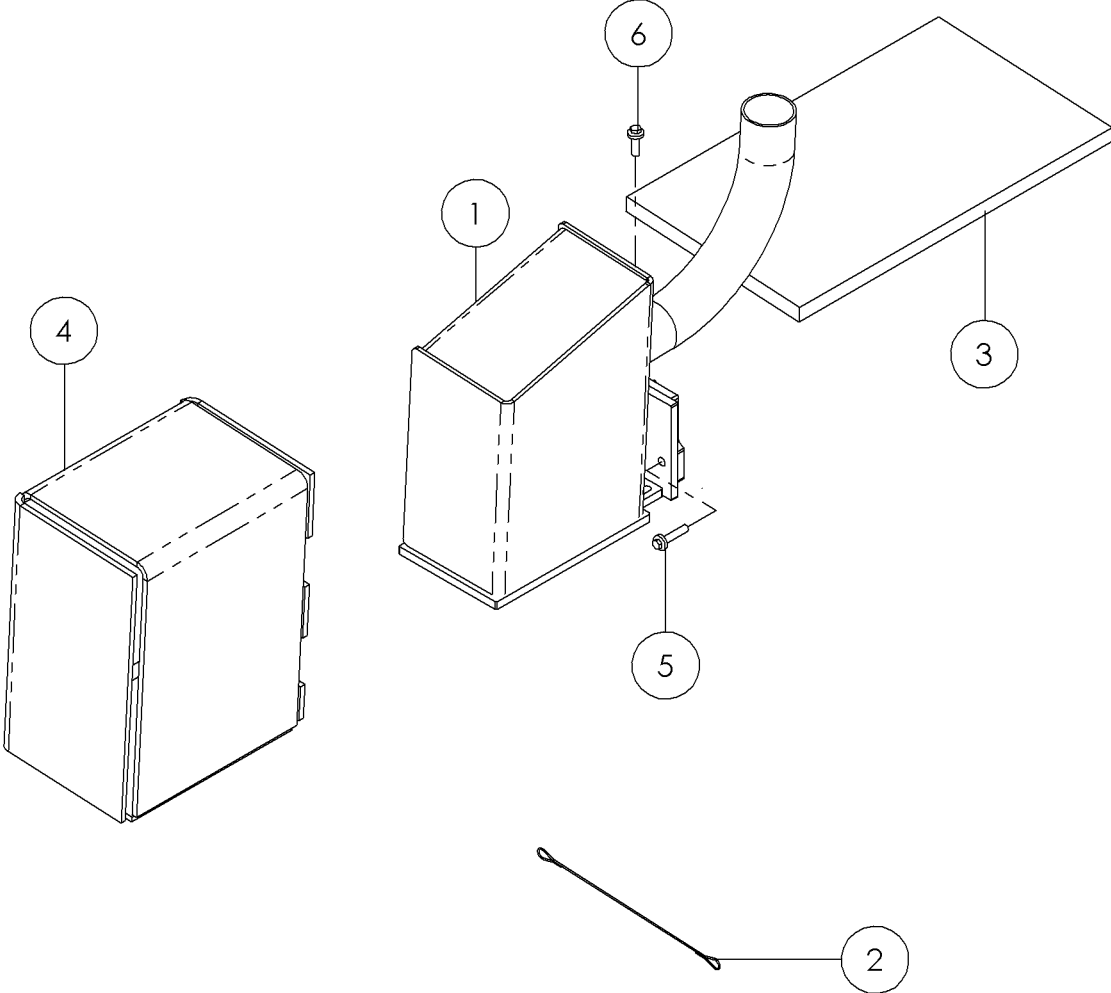


Illustration No. 296306103

## Muffler (S/N 166-) Fig 5-4r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	April, 2008		Update QTY.
1		296299040	WELDMENT - MUFFLER	1	(S/N 166-)
2		142422001	CABLE-.068 DIA.NYLON COATED	1	
3	*	296299047	BLANKET - EXHAUST	1	
4		296299048	BLANKET - MUFFLER HEAT	1	
5		507611035	SCREW-HFS,M8- 1.25X35,10.9,YZ,D6921,PT	4	
6		507611025	SCREW-HFS,M8- 1.25X25,10.9,YZ,D6921,FT	2	

Muffler (S/N 150-165) Fig 5-4r01

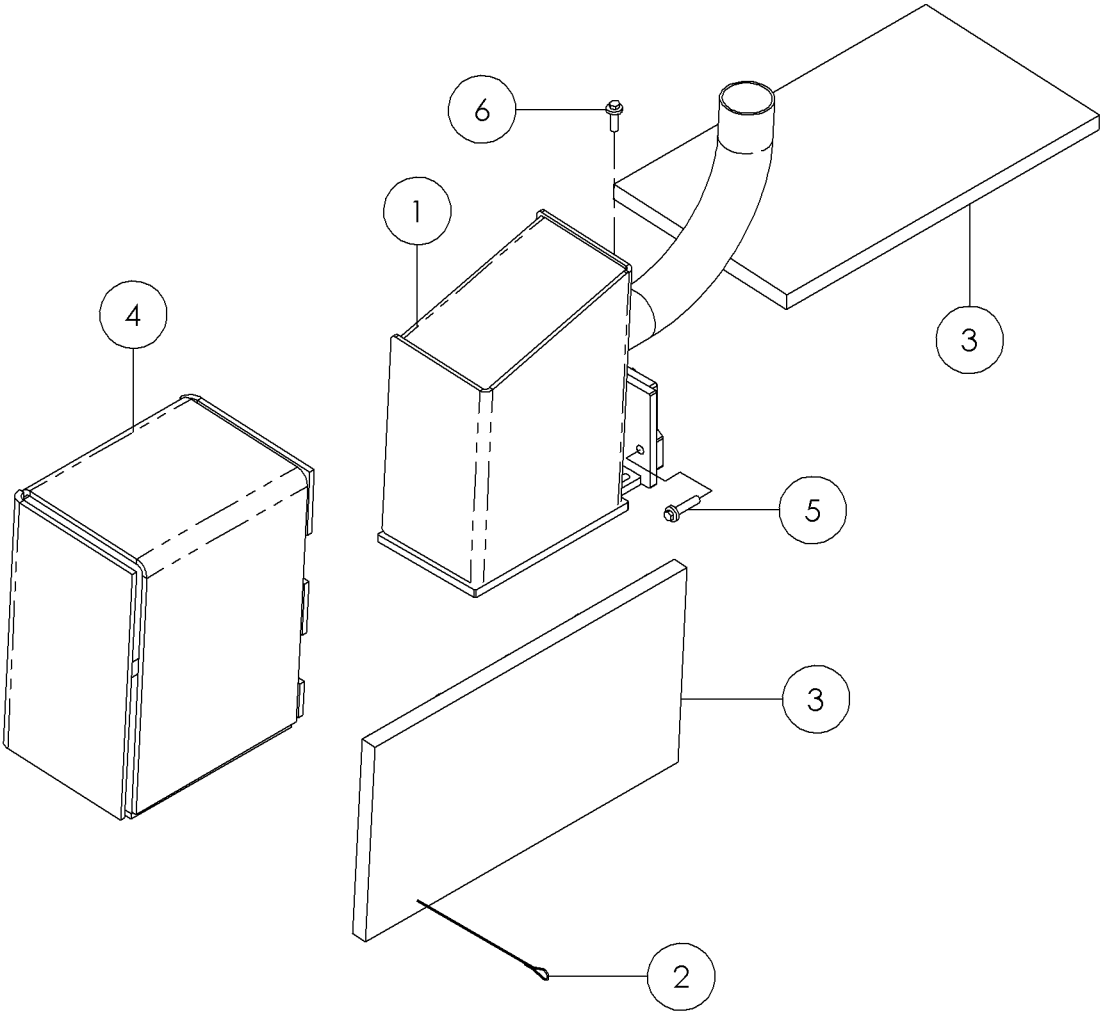


Illustration No. 296284449



## Muffler (S/N 150-165) Fig 5-4r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Add Serial Break.
1		296299018	WELDMENT - MUFFLER	1	
2		142422001	CABLE-.068 DIA.NYLON COATED	1	
3		296299047	BLANKET - EXHAUST	2	
4	*	296299048	BLANKET - MUFFLER HEAT	1	(SN 150-)
5		507611035	SCREW-HFS,M8-1.25X35,10.9,YZ,D6921,PT	4	
6		507611025	SCREW-HFS,M8-1.25X25,10.9,YZ,D6921,FT	2	

Muffler (S/N 101-149) Fig 5-4

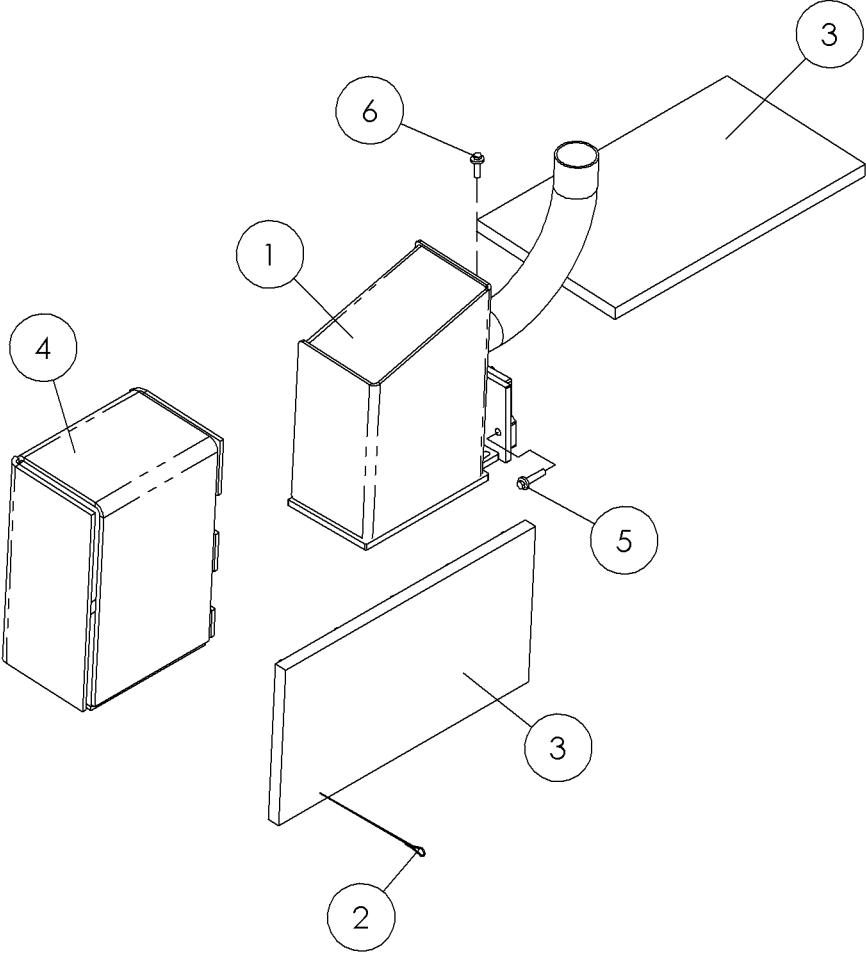


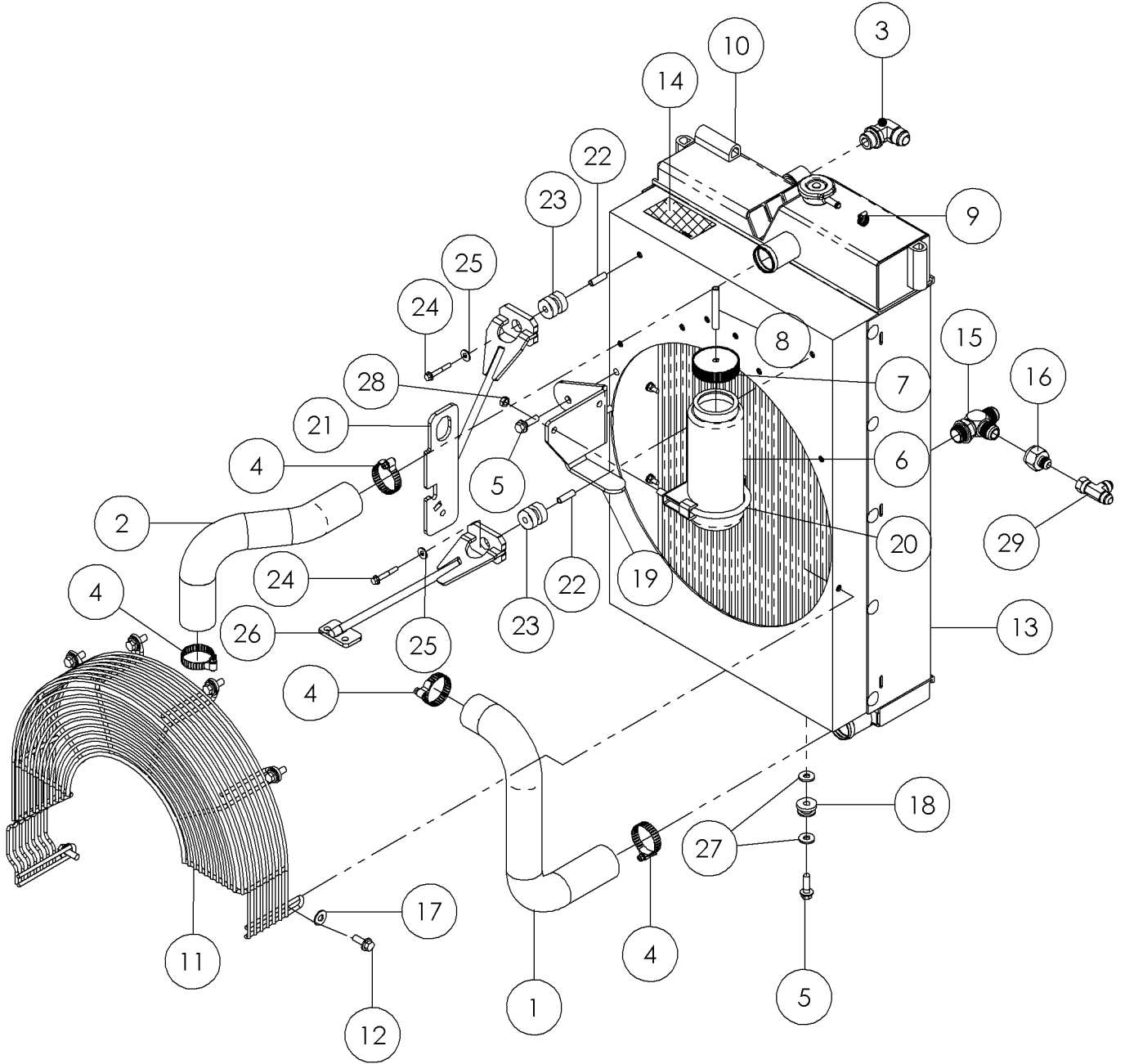
Illustration No. 296284449

## Muffler (S/N 101-149) Fig 5-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296299018	WELDMENT - MUFFLER	1	
2		142422001	CABLE-.068 DIA.NYLON COATED	1	
3		296299047	BLANKET - EXHAUST	2	
4		296299048	BLANKET - MUFFLER HEAT	1	
5		507611035	SCREW-HFS,M8- 1.25X35,10.9,YZ,D6921,PT	4	
6		507611025	SCREW-HFS,M8- 1.25X25,10.9,YZ,D6921,FT	2	

Cooling Package (S/N 302-) Fig 5-5r06

Illustration No. 296306371



## Cooling Package (S/N 302-) Fig 5-5r06

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284437	HOSE-LOWER RADIATOR'	1	
2		296284438	HOSE-UPPER RADIATOR	1	
3		59410001	FITTING-90-12MJ-12MORBA	1	
4		1580009	HOSE CLAMP - 1 3/4"	4	
5		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	10	
6		63949001	BOTTLE-UV CNTRL THCK WALL CLNT	1	
7		63948001	CAP-70MM G.	1	
8		620001	HOSE - 5/16 FUEL LINE	1	
9		1578001	HOSE CLAMP-WORM GEAR-1/4"-5/8"	1	
10		288982001	SEAL - 1" X 1" HALF ROUND	3	
11		296294209	GUARD - WIRE FAN	1	
12		296300772	SCREW-HFS-.38-16X1.00-GR8-YZ	6	
13		296284429	RADIATOR - COMBO	1	Breakdown Fig. 5-5z01
14		2326315	DECAL-WARNING	1	Domestic
14		23261315	DECAL-WARNING	1	International
15		59420001	12 JICX12M ADJ. STR THRD RUN TEE	1	
16		59421001	12F JICX8M JIC ST REDUCER FITTING	1	
17		510337607	WASHER-FLATSTD-.38-.44X1.00-.08-YZ	6	
18		255048001	ISOLATOR-RADIATOR	8	
19		296306348	BRACKET - OVERFLOW TANK	1	
20		2609013	CLAMP-MUFFLER 3 1/2	1	
21		296306369	SUPPORT - LEFT RADIATOR	1	
22		291550001	SPACER-RADIATOR ISOLATOR	2	
23		294553001	MOUNT-UPPER RADIATOR ISOLATOR	2	
24		296300757	SCREW-HFS-.25-20X1.75-GR8-YZ	2	
25		485003	WASHER-1/4 FLAT	2	
26		296306370	SUPPORT - RIGHT RADIATOR	1	
27		613948001	WASHER- 3/8 X 1.00 O.D.	16	
28		250576001	NUT-3/8 NC HEX JAM W/Y-ZINC	2	
29		59461001	*8 JIC SW RUN TEE	1	(S/N 302-)

Cooling Package (S/N 291-301) Fig 5-5r05

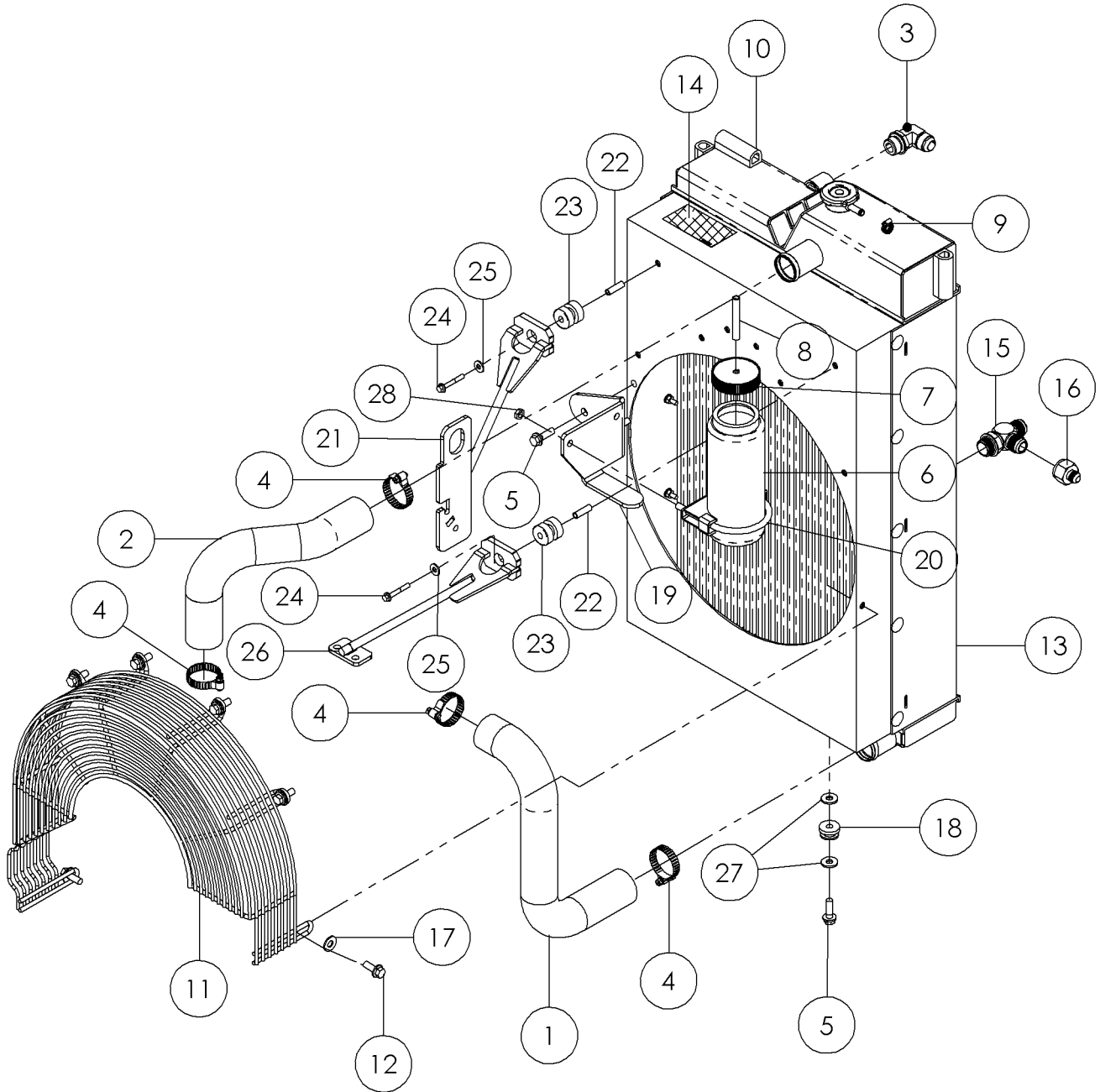


Illustration No. 296306353

## Cooling Package (S/N 291-301) Fig 5-5r05

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284437	HOSE-LOWER RADIATOR'	1	
2		296284438	HOSE-UPPER RADIATOR	1	
3		59410001	FITTING-90-12MJ-12MORBA	1	
4		1580009	HOSE CLAMP - 1 3/4"	4	
5		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	10	
6		63949001	BOTTLE-UV CNTRL THCK WALL CLNT	1	
7		63948001	CAP-70MM G.	1	
8		620001	HOSE - 5/16 FUEL LINE	1	
9		1578001	HOSE CLAMP - 1/4"	1	
10		288982001	SEAL - 1" X 1" HALF ROUND	3	
11		296294209	GUARD - WIRE FAN	1	
12		296300772	SCREW-HFS-.38-16X1.00-GR8-YZ	6	
13		296284429	RADIATOR - COMBO	1	Breakdown Fig. 5-5z01
14		2326315	DECAL-WARNING	1	Domestic
		2326I315	DECAL-WARNING	1	International
15		59420001	12 JICX12M ADJ. STR THRD RUN TEE	1	
16		59421001	12F JICX8M JIC ST REDUCER FITTING	1	
17		510337607	WASHER-FLATSTD-.38-.44X1.00-.08-YZ	6	
18		255048001	ISOLATOR-RADIATOR	8	
19		296306348	BRACKET - OVERFLOW TANK	1	
20		2609013	CLAMP-MUFFLER 3 1/2	1	
21		296306369	*SUPPORT - LEFT RADIATOR	1	
22		291550001	SPACER-RADIATOR ISOLATOR	2	
23		294553001	MOUNT-UPPER RADIATOR ISOLATOR	2	
24		296300757	SCREW-HFS-.25-20X1.75-GR8-YZ	2	
25		485003	WASHER-1/4 FLAT	2	
26		296306370	SUPPORT - RIGHT RADIATOR	1	
27		613948001	WASHER- 3/8 X 1.00 O.D.	16	
28		250576001	NUT-3/8 NC HEX JAM W/Y-ZINC	2	

Cooling Package (S/N 166-290) Fig 5-5r04

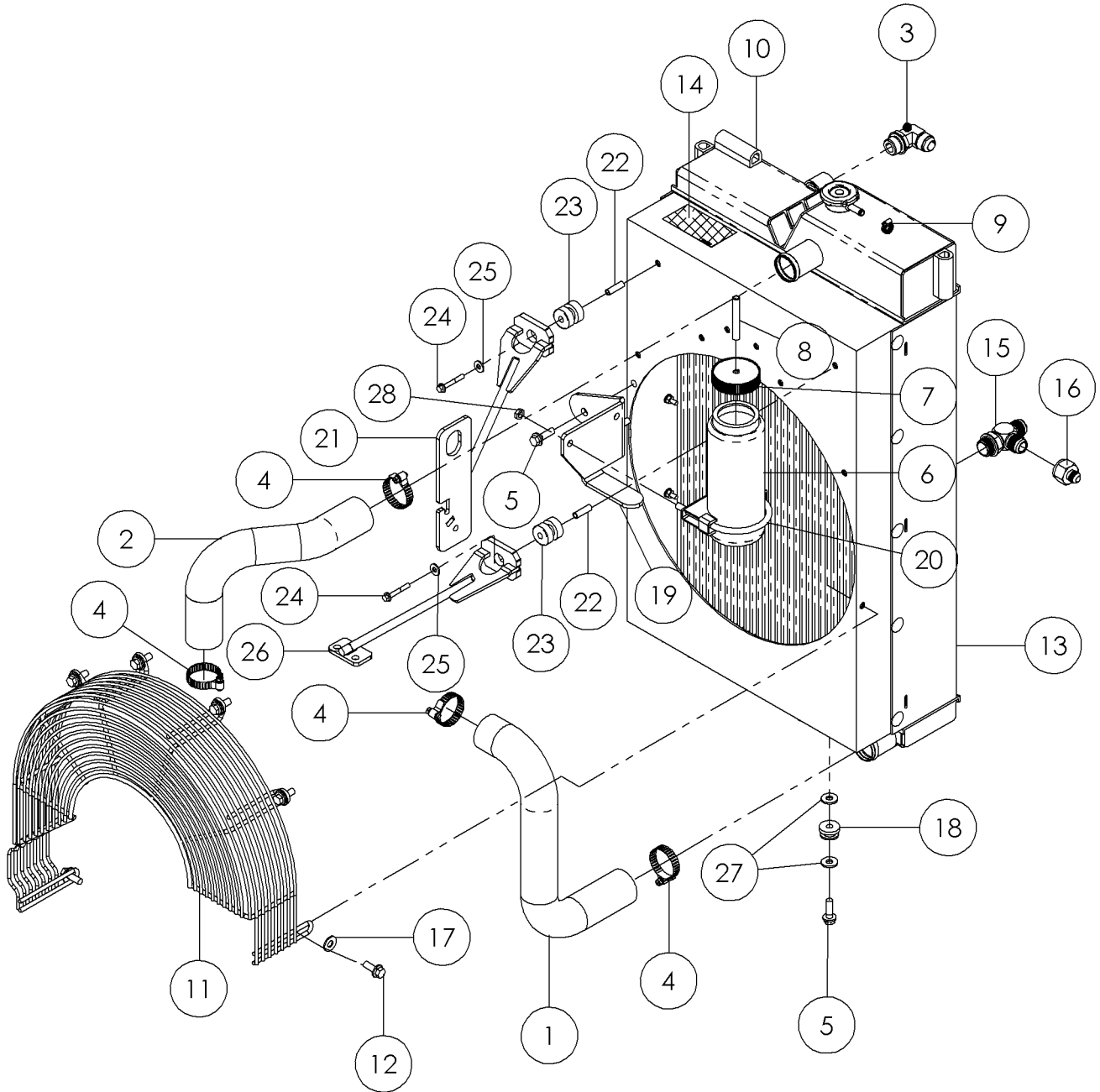


Illustration No. 296306353



## Cooling Package (S/N 166-290) Fig 5-5r04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	April, 2008		Update In Illustration & Parts List.
1		296284437	HOSE-LOWER RADIATOR'	1	
2		296284438	HOSE-UPPER RADIATOR	1	
3		59410001	FITTING-90-12MJ-12MORBA	1	
4		1580009	HOSE CLAMP - 1 3/4"	4	
5		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	10	
6		63949001	BOTTLE-UV CNTRL THCK WALL CLNT	1	
7		63948001	CAP-70MM G.	1	
8		620001	HOSE - 5/16 FUEL LINE	1	
9		1578001	HOSE CLAMP - 1/4"	1	
10		288982001	SEAL - 1" X 1" HALF ROUND	3	
11		296294209	GUARD - WIRE FAN	1	(S/N 166-)
12		296300772	SCREW-HFS-.38-16X1.00-GR8-YZ	6	
13		296284429	RADIATOR - COMBO	1	Breakdown Fig. 5-5a
14		2326315	DECAL-WARNING	1	Domestic
		23261315	DECAL-WARNING	1	International
15		59420001	12 JICX12M ADJ. STR THRD RUN TEE	1	
16		59421001	12F JICX8M JIC ST REDUCER FITTING	1	
17		510337607	WASHER-FLATSTD-.38-.44X1.00-.08-YZ	6	
18		255048001	ISOLATOR-RADIATOR	8	
19		296306348	BRACKET - OVERFLOW TANK	1	
20		2609013	CLAMP-MUFFLER 3 1/2	1	
21		296306369	SUPPORT - LEFT RADIATOR	1	(S/N 166-)
22		291550001	SPACER-RADIATOR ISOLATOR	2	
23		294553001	MOUNT-UPPER RADIATOR ISOLATOR	2	
24		296300757	SCREW-HFS-.25-20X1.75-GR8-YZ	2	
25		485003	WASHER-1/4 FLAT	2	
26		296306370	SUPPORT - RIGHT RADIATOR	1	(S/N 166-)
27		613948001	WASHER- 3/8 X 1.00 O.D.	16	
28		250576001	NUT-3/8 NC HEX JAM W/Y-ZINC	2	

Cooling Package (S/N 166-) Fig 5-5r03

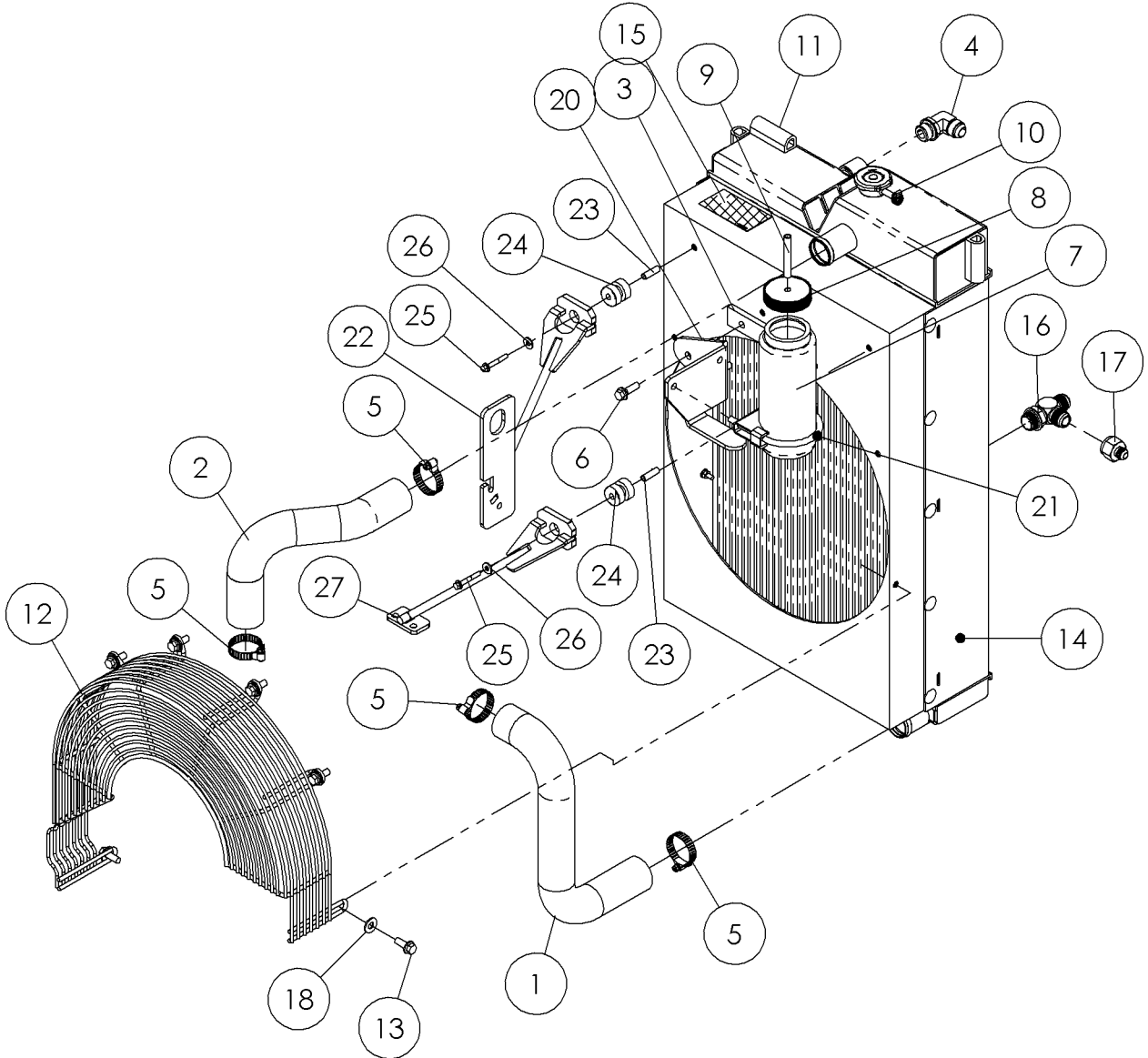


Illustration No. 296306371

## Cooling Package (S/N 166-) Fig 5-5r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Change Brackets
1		296284437	HOSE-LOWER RADIATOR'	1	
2		296284438	HOSE-UPPER RADIATOR	1	
3		296283898	RUBBER-TOP RADIATOR MOUNT D10X14	1	
4		59410001	FITTING-90-12MJ-12MORBA	1	
5		1580009	HOSE CLAMP - 1 3/4"	4	
6		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	10	
7		63949001	BOTTLE-UV CNTRL THCK WALL CLNT	1	
8		63948001	CAP-70MM G.	1	
9		620001	HOSE - 5/16 FUEL LINE	1	
10		1578001	HOSE CLAMP - 1/4"	1	
11		288982001	SEAL - 1" X 1" HALF ROUND	3	
12	*	296294209	GUARD - WIRE FAN	1	(S/N 166-)
13		296300772	SCREW-HFS-.38-16X1.00-GR8-YZ	6	
14		296284429	RADIATOR - COMBO	1	Breakdown Fig. 5-5a
15		2326315	DECAL-WARNING	1	Domestic
		2326I315	DECAL-WARNING	1	International
16		59420001	12 JICX12M ADJ. STR THRD RUN TEE	1	
17		59421001	12F JICX8M JIC ST REDUCER FITTING	1	
18		510337607	WASHER-FLATSTD-.38-.44X1.00-.08-YZ	6	
19		255048001	ISOLATOR-RADIATOR	8	
20		296306348	BRACKET - OVERFLOW TANK	1	
21		2609013	CLAMP-MUFFLER 3 1/2	1	
22	*	296306369	SUPPORT - LEFT RADIATOR	1	(S/N 166-)
23		291550001	SPACER-RADIATOR ISOLATOR	2	
24		294553001	MOUNT-UPPER RADIATOR ISOLATOR	2	
25		296300757	SCREW-HFS-.25-20X1.75-GR8-YZ	2	
26		485003	WASHER-1/4 FLAT	2	
27	*	296306370	SUPPORT - RIGHT RADIATOR	1	(S/N 166-)
28		613948001	WASHER- 3/8 X 1.00 O.D.	8	

Cooling Package (S/N 101-165) Fig 5-5r02

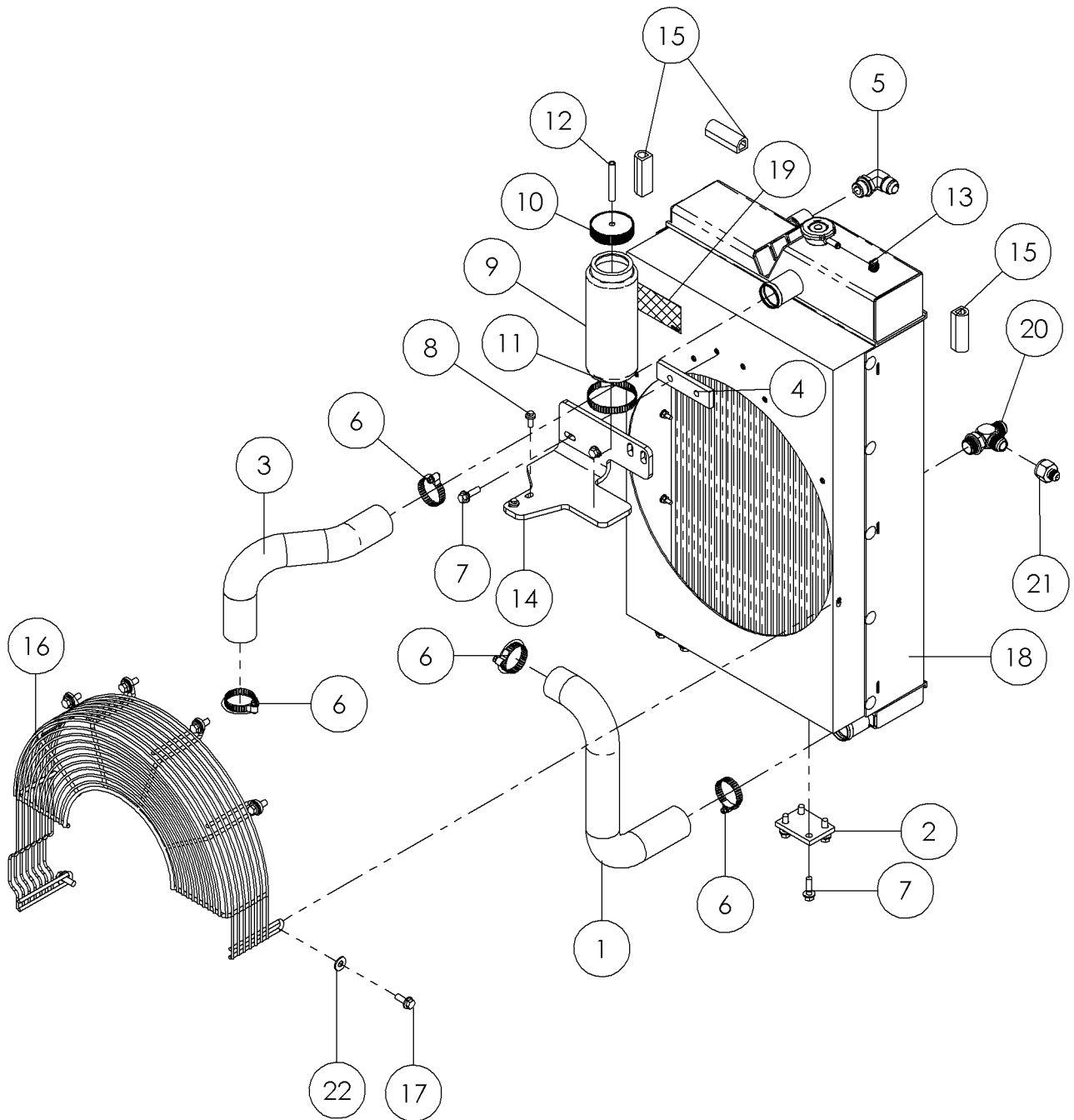


Illustration No. 296281230

## Cooling Package (S/N 101-165) Fig 5-5r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296284437	HOSE-LOWER RADIATOR	1	
2		296283943	ISOLATOR PAD-LOWER RAD MOUNT D10X14	2	
3		296284438	HOSE-UPPER RADIATOR	1	
4		296283898	RUBBER-TOP RADIATOR MOUNT D10X14	1	
5		59410001	FITTING-90-12MJ-12MORBA	1	
6		1580009	HOSE CLAMP - 1 3/4"	4	
7		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	10	
8		507611020	SCREW-HFS,M8- 1.25X20,10.9,YZ,D6921,FT	2	
9		63949001	BOTTLE-UV CNTRL THCK WALL CLNT	1	
10		63948001	CAP-70MM G.	1	
11		1580015	HOSE CLAMP - 3"	1	
12		620001	HOSE - 5/16 FUEL LINE	1	
13		1578001	HOSE CLAMP - 1/4"	1	
14		296284485	PLATE - UPPER RADIATOR MOUNT	1	
15		288982001	SEAL - 1" X 1" HALF ROUND	3	
16		296294209	GUARD - WIRE FAN	1	
17		296300772	SCREW-HFS-.38-16X1.00-GR8-YZ	6	
18		296284429	RADIATOR - COMBO	1	Breakdown Fig. 5-5a
19		2326315	DECAL-WARNING	1	Domestic
		2326I315	DECAL-WARNING	1	International
20		59420001	12 JICX12M ADJ. STR THRD RUN TEE	1	
21		59421001	12F JICX8M JIC ST REDUCER FITTING	1	
22	*	510337607	WASHER-FLATSTD-.38-.44X1.00-.08-YZ	6	

Cooling Package Fig 5-5r01

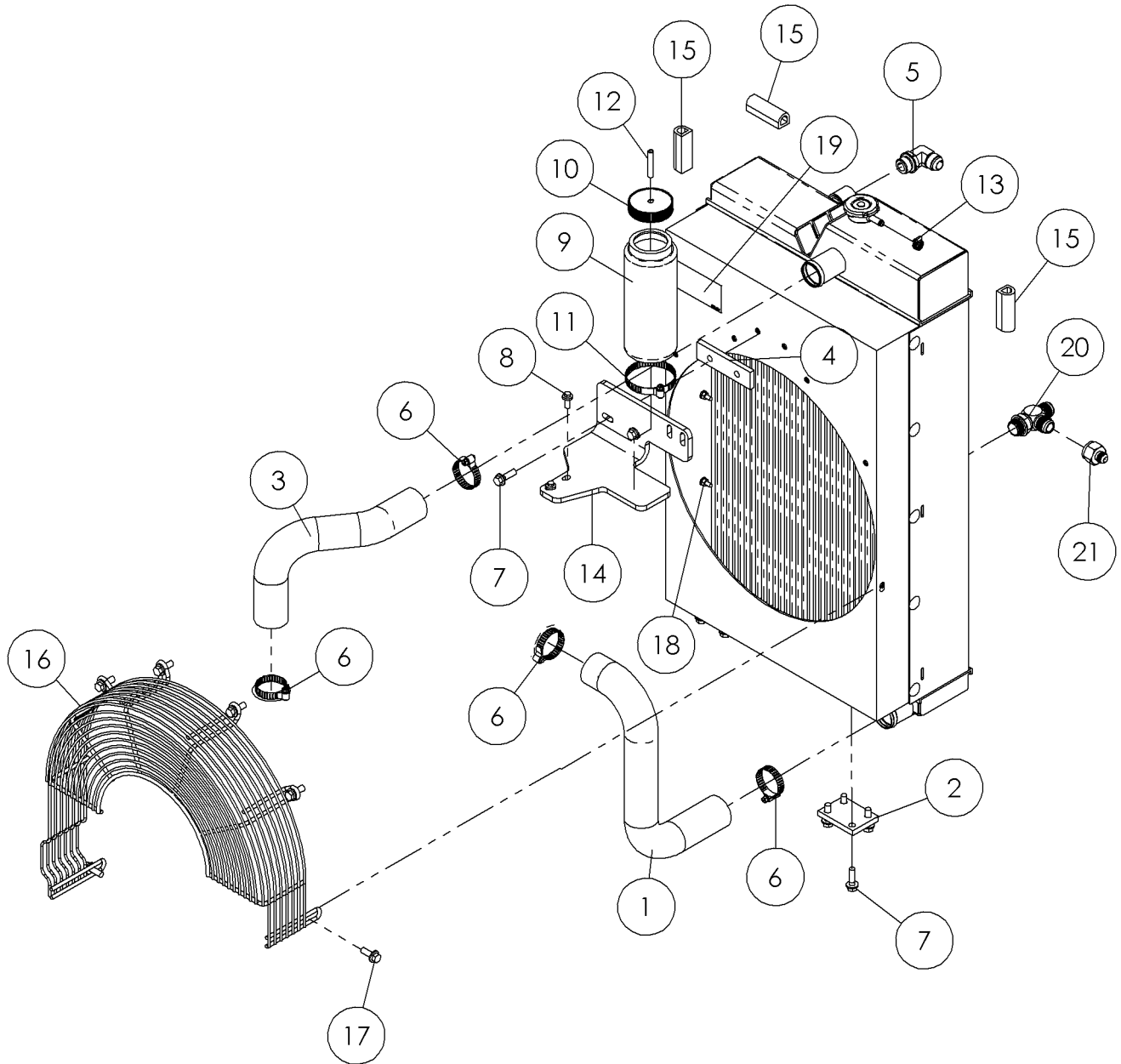


Illustration No. 296281230

## Cooling Package Fig 5-5r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Add Screws
1		296284437	HOSE - LOWER RADIATOR	1	
2		296283943	ISOLATOR PAD-LOWER RADIATOR MOUNT	2	
3		296284438	HOSE - UPPER RADIATOR	1	
4		296283898	RUBBER - TOP RADIATOR MOUNT	1	
5		59410001	FITTING-90-12MJ-12MORBA	1	
6		1580009	HOSE CLAMP-1 3/4"	4	
7		296300773	SCREW-HFS-.38-16x1.25-GR8-YZ	10	
8		507611020	SCREW-HFS-M8-1.25X20-10.9-YZ-D6921-FT	2	
9		63949001	BOTTLE-UV CNTROL	1	
10		63948001	CAP-70MM G.	1	
11		1580015	HOSE CLAMP 3"	1	
12		619001	HOSE-1/4 I.D. GASOLINE & DIESEL	1	
13		1578001	HOSE CLAMP - 1/4"	1	
14		296284485	PLATE - UPPER RADIATOR MOUNT	1	
15		288982001	SEAL-1.0X1.0 HALF ROUND	3	
16		296294209	GUARD - WIRE FAN	1	
17	*	296300772	SCREW-HFS-.38-16x1.00-GR8-YZ	6	
18		296284429	RADIATOR - COMBO	1	
19		2326315	DECAL-WARNING	1	
20		59420001	FITTING-RTEE-12MJ-12MORBA-12MJ	1	
21		59421001	12F JICX8M JIC ST REDUCER FITTING	1	

Cooling Package Fig 5-5

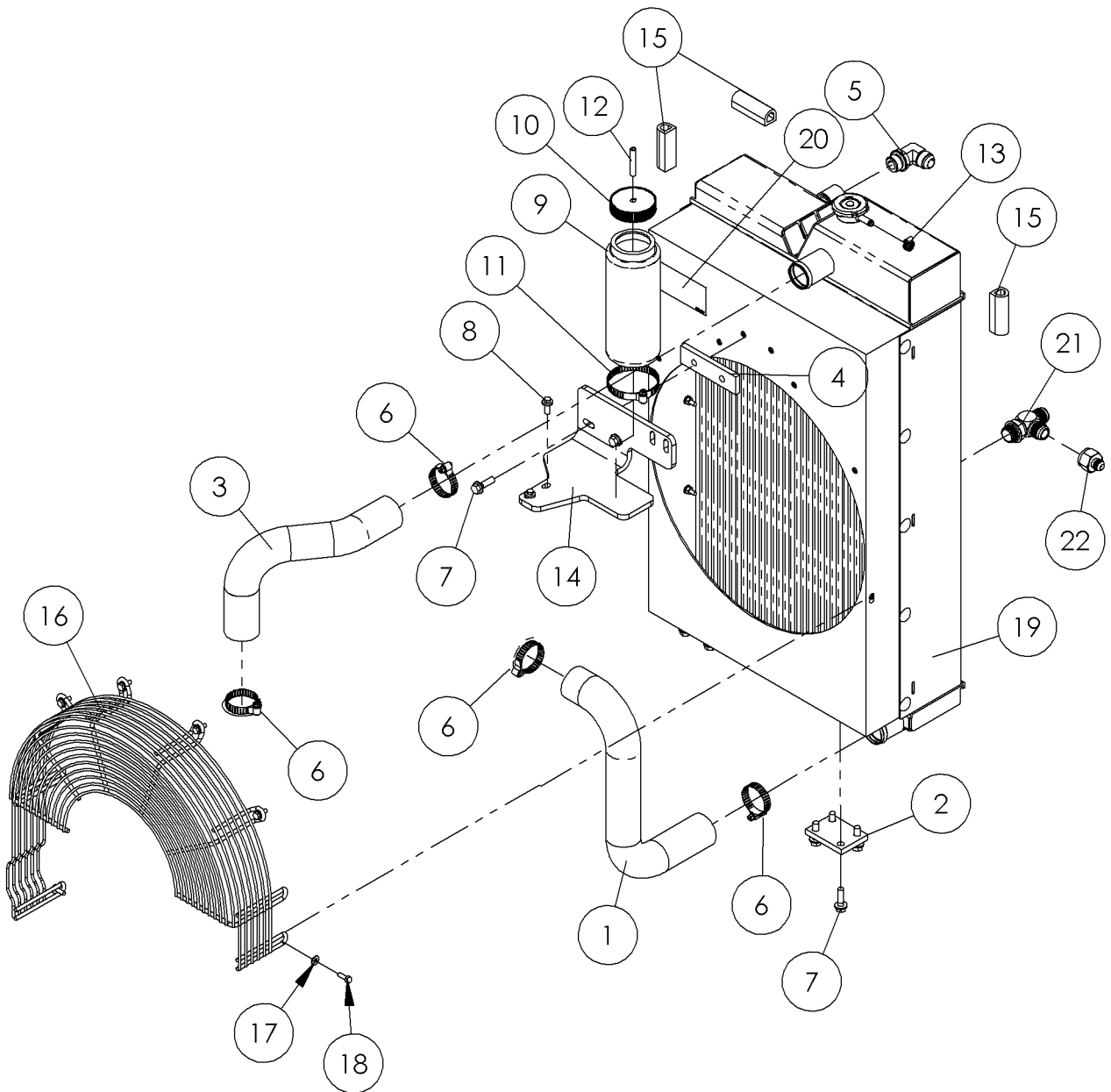


Illustration No. 296281230



## Cooling Package Fig 5-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284437	HOSE-LOWER RADIATOR'	1	
2		296283943	ISOLATOR PAD-LOWER RAD MOUNT D10X14	2	
3		296284438	HOSE-UPPER RADIATOR	1	
4		296283898	RUBBER-TOP RADIATOR MOUNT D10X14	1	
5		59410001	FITTING-90-12MJ-12MORBA	1	
6		1580009	HOSE CLAMP - 1 3/4"	4	
7		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	10	
8		507611020	SCREW-HFS,M8- 1.25X20,10.9,YZ,D6921,FT	2	
9		63949001	BOTTLE-UV CNTRL THCK WALL CLNT	1	
10		63948001	CAP-70MM G.	1	
11		1580015	HOSE CLAMP - 3"	1	
12		619001	HOSE-1/4 I.D.GASOLINE&DIESEL	1	
13		1578001	HOSE CLAMP - 1/4"	1	
14		296284485	PLATE - UPPER RADIATOR MOUNT	1	
15		288982001	SEAL - 1" X 1" HALF ROUND	3	
16		296294209	GUARD - WIRE FAN	1	
17		235716001	WASHER - FLATSTRL - .25 -.28 X .63 - .06 - CZ	6	
18		235734001	BOLT-1/4-20X3/4 GR8 ZYC	6	
19		296284429	RADIATOR - COMBO	1	Breakdown Fig. 5-5a
20		2326315	DECAL-WARNING	1	Domestic
		2326I315	DECAL-WARNING	1	International
21		59420001	12 JICX12M ADJ. STR THRD RUN TEE	1	
22		59421001	12F JICX8M JIC ST REDUCER FITTING	1	

Components-Radiator/Cooler Fig 5-5z01

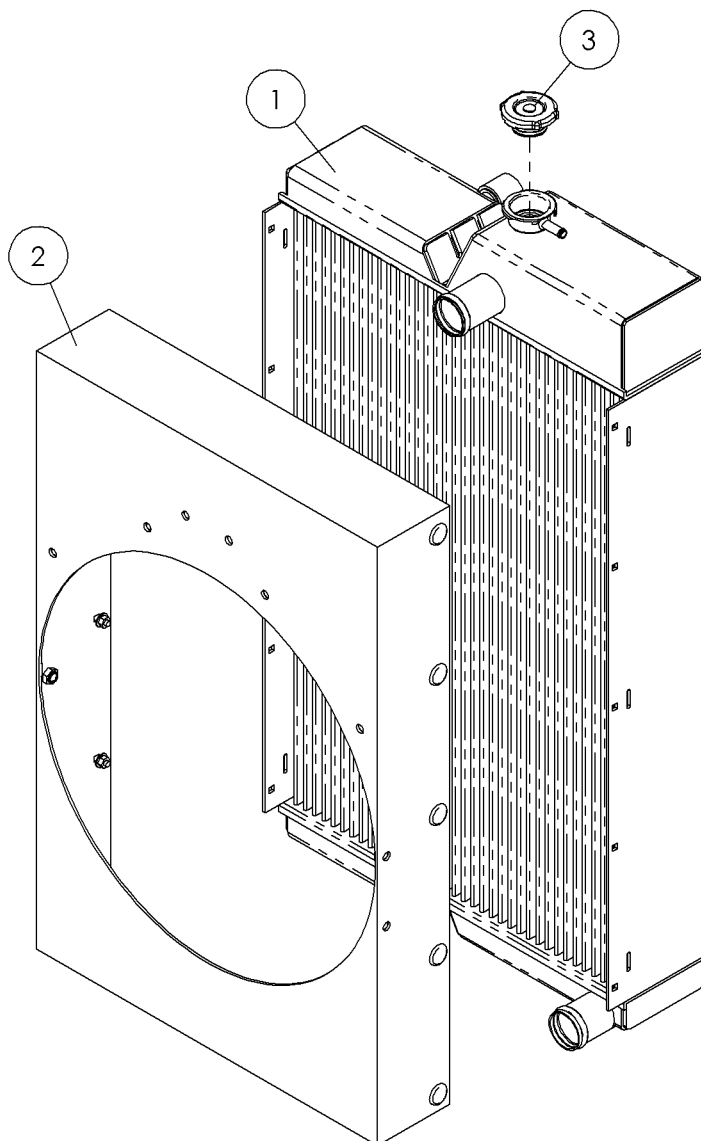


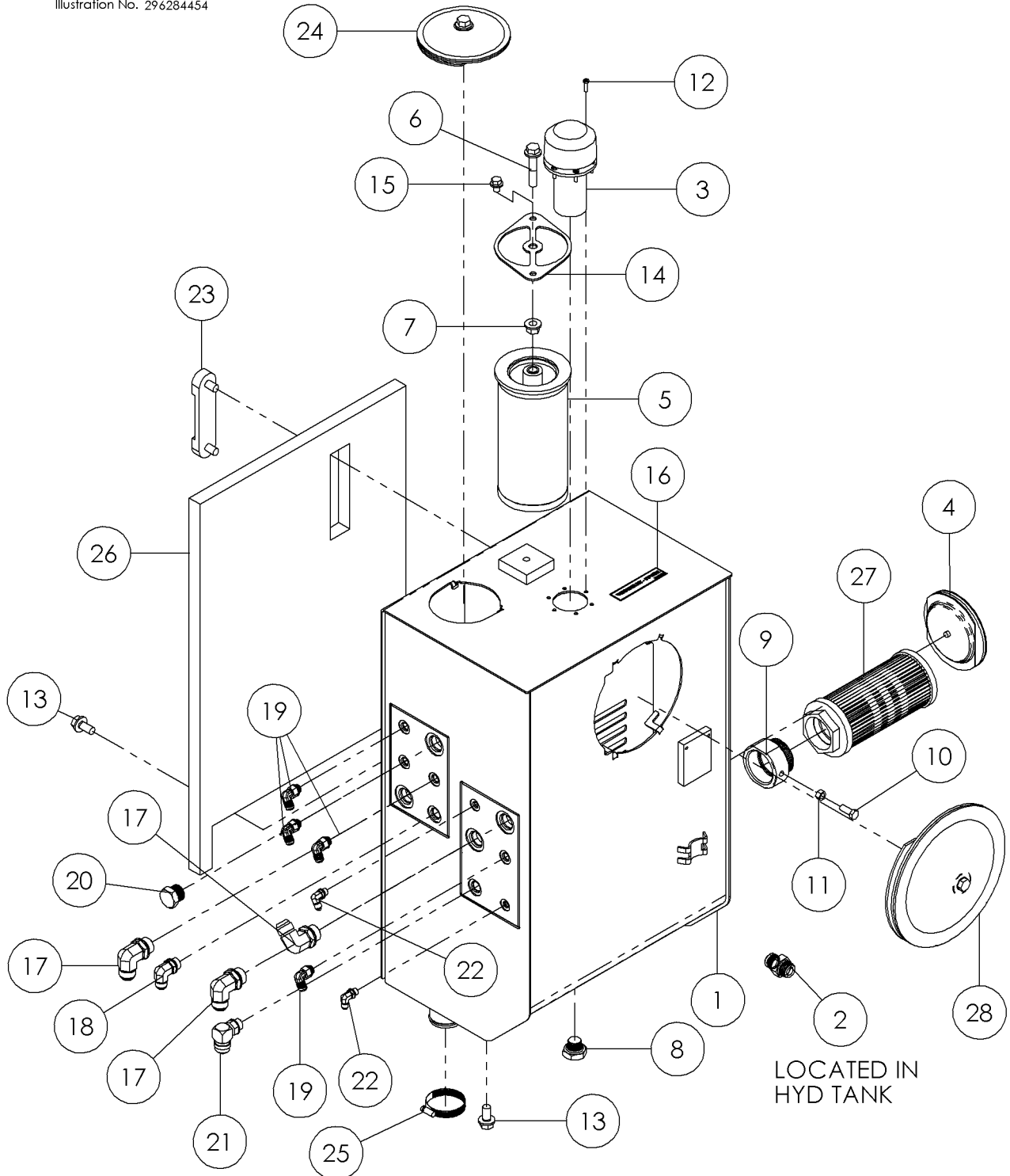
Illustration No. 296284429

## Components-Radiator/Cooler Fig 5-5z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296294248	CORE & TANK ASSY	1	
2		296294247	SHROUD-COOLER	1	
3		296276784	CAP-RAD 13 PSI	1	

Hydraulic Tank (159, 166-) Fig 6-1r03

Illustration No. 296284454



## Hydraulic Tank (159, 166-) Fig 6-1r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288716	HYD TANK	1	
2		229396001	VALVE-85 PSI INLINE CHECK	1	
3		235808001	CAP-FILLER/BREATHING W/O RELIEF	1	
4		296257231	COVER - 6" RESERVOIR END	2	
5		624362001	FILTER ASSEMBLY-HYDRAULIC	1	
6		296300794	SCREW-HFS-.50-13X2.50-GR8-YZ	1	
7		296300851	NUT-HEXFLGTL-.50-13-G-YZ	1	
8		613818001	PLUG - 12M ORING HEX MAGNETIC	1	
9		296277699	RD BAR - NIPPLE HYD. TANK FILTER	1	
10		235727001	SCREW-HCS-.38-16X1.00-GR8-YZ	1	
11		235725001	NUT - HEX - .38 - 16 - GR8 - YZ	1	
12		1802006	BOLT-10-24 X 3/4 RND HD STOVE	6	
13		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	5	
14		296293751	PLATE - FILTER HOLD DOWN	1	
15		296300922	SCREW-HFS-.38-16X50-GR8-YZ	2	
16		70000394	DECAL-VERMEER HY POWER	1	
17		59410001	FITTING-90-12MJ-12MORBA	3	
18		53837001	FITTING - 8M O-RING X 8M JIC 90 DEGREE	1	
19		59426001	FITTING - 90-6MJ-6MORBA	4	
20		67570001	FITTING - PLUG - 12MORB - HEX	1	
21		59411001	12M JICX8M ADJ. 90 DEG.ELBOW	1	
22		59423001	90-4MORBA-4MJ	2	
23		267758001	INDICATOR - FLUID LEVEL W/TEMP	1	
24		296289830	COVER - 6" CLEAN-OUT, (FCC-06-YZ-BN)	1	
25		1580013	HOSE CLAMP - WORM GEAR - 2 1/16" - 3"	1	
26		296296142	FOAM - HYD TANK FRONT	1	
27		296294231	STRAINER - SUCTION 2" FNPT	1	
28		296292015	COVER - 10" OIL TANK	1	

Hydraulic Tank (S/N 135-158) Fig 6-1r02

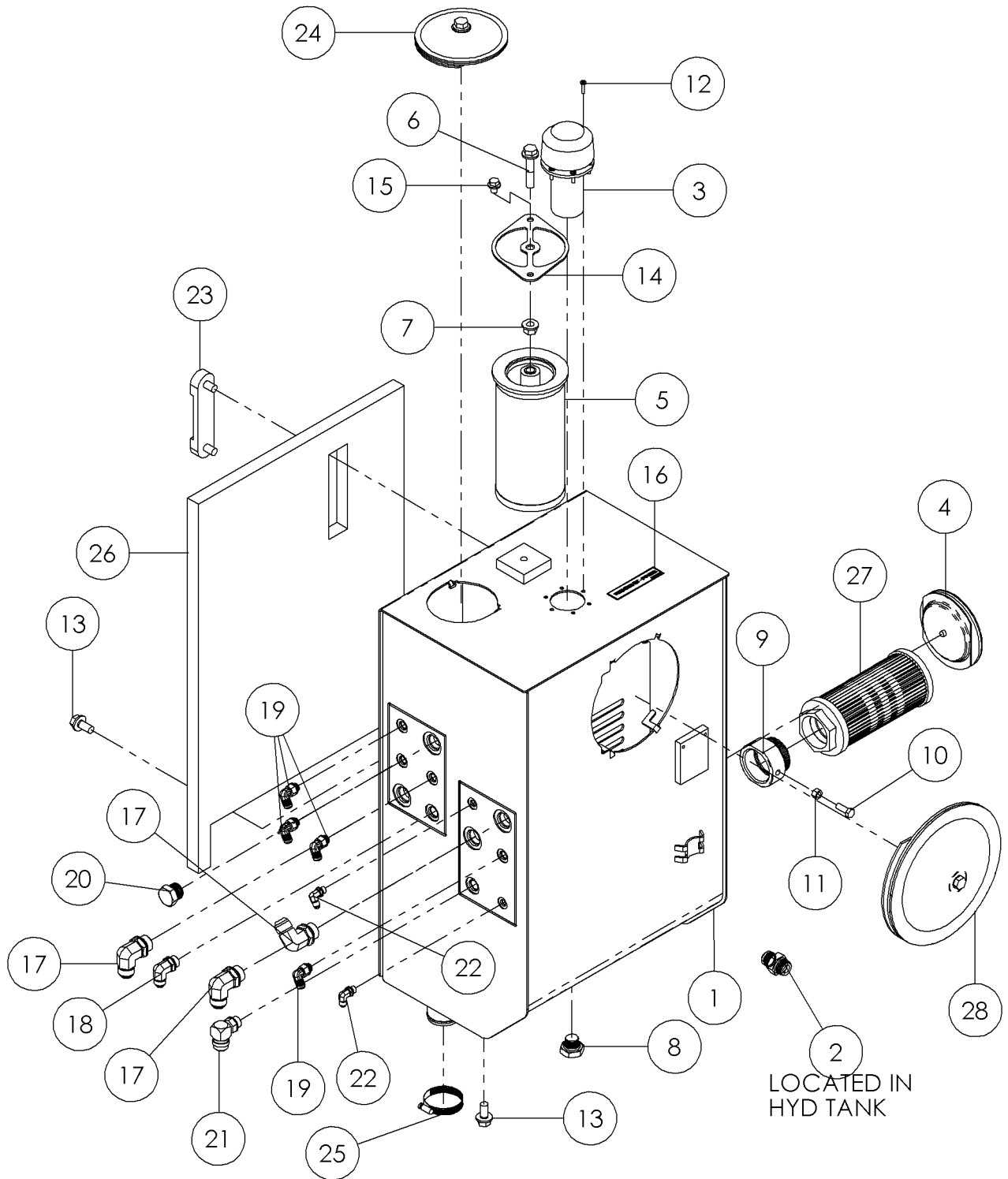


Illustration No. 296284454

## Hydraulic Tank (S/N 135-158) Fig 6-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		296288716	HYD TANK	1	(SN 112-)
2		229396001	VALVE-85 PSI INLINE CHECK	1	
3		235808001	CAP-FILLER/BREATHING W/O RELIEF	1	
4		296257231	COVER - 6" RESERVOIR END	2	
5		624362001	FILTER ASSEMBLY-HYDRAULIC	1	
6		296300794	SCREW-HFS-.50-13X2.50-GR8-YZ	1	
7		296300851	NUT-HEXFLGTL-.50-13-G-YZ	1	
8		613818001	PLUG - 12M ORING HEX MAGNETIC	1	
9		296277699	RD BAR - NIPPPLE HYD. TANK FILTER	1	
10		235727001	SCREW-HCS-.38-16X1.00-GR8-YZ	1	
11		235725001	NUT - HEX - .38 - 16 - GR8 - YZ	1	
12		1802006	BOLT-10-24 X 3/4 RND HD STOVE	6	
13		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	5	
14		296293751	PLATE - FILTER HOLD DOWN	1	
15		296300922	SCREW-HFS-.38-16X50-GR8-YZ	2	
16		70000394	DECAL-VERMEER HY POWER	1	
17		59410001	FITTING-90-12MJ-12MORBA	3	
18	*	53837001	FITTING - 8M O-RING X 8M JIC 90 DEGREE	1	(SN 135-)
19		59426001	FITTING - 90-6MJ-6MORBA	4	
20		67570001	FITTING - PLUG - 12MORB - HEX	1	
21	*	59411001	12M JICX8M ADJ. 90 DEG.ELBOW	1	
22		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	2	
23		267758001	INDICATOR - FLUID LEVEL W/TEMP	1	
24		296289830	COVER - 6" CLEAN-OUT, (FCC-06-YZ-BN)	1	
25		1580013	HOSE CLAMP - 2 1/2"	1	
26		296296142	FOAM - HYD TANK FRONT	1	
27		296294231	STRAINER - SUCTION 2" FNPT	1	
28		296292015	COVER 10"OIL TANK	1	(SN 112-)

Hydraulic Tank (S/N 112-134 Fig 6-1r01

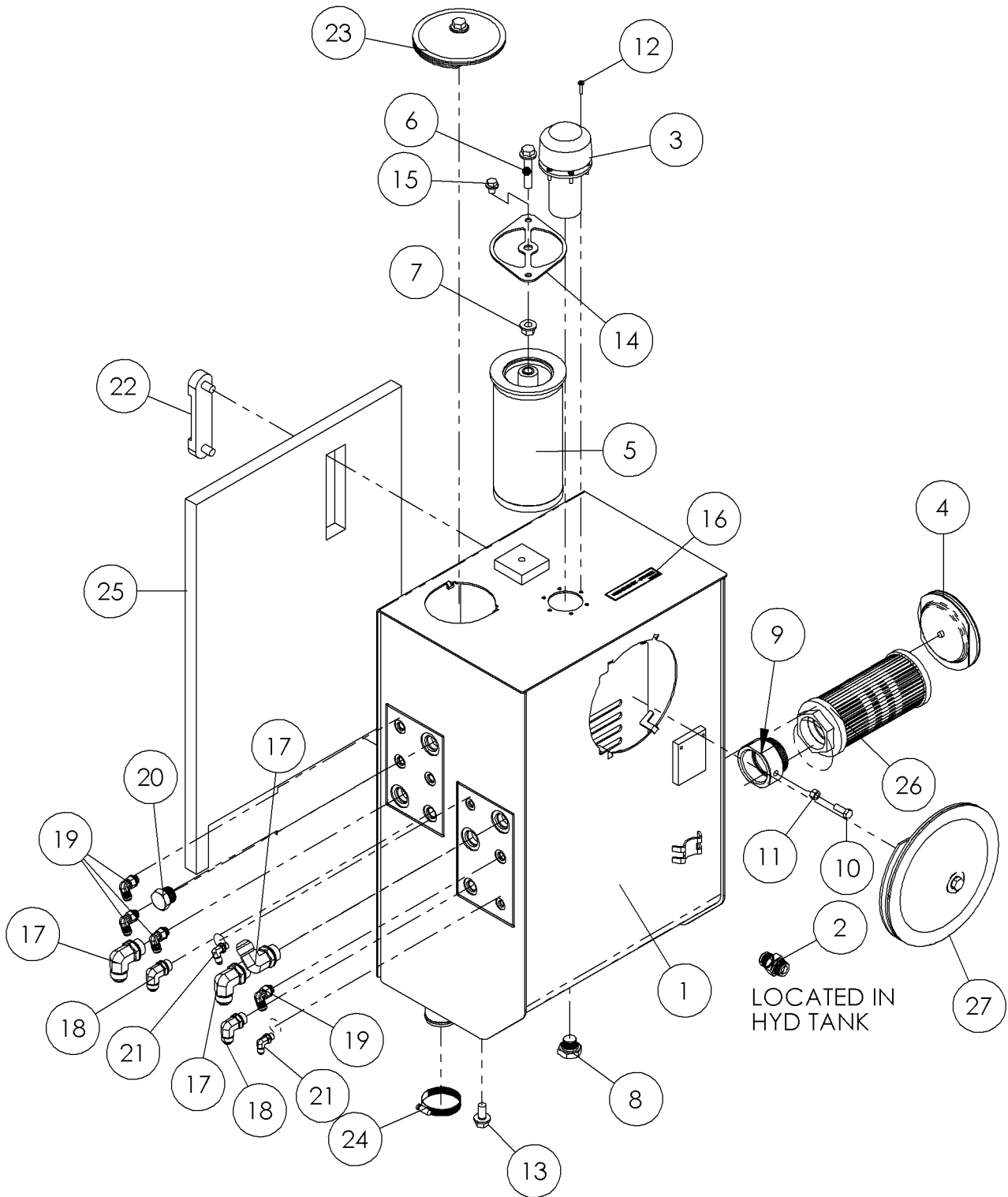


Illustration No. 296284454



## Hydraulic Tank (S/N 112-134 Fig 6-1r01)

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1	*	296288716	HYD TANK	1	(S/N 112-)
2		229396001	VALVE-85 PSI INLINE CHECK	1	
3		235808001	CAP-FILLER/BREATHING W/O RELIEF	1	
4		296257231	COVER - 6" RESERVOIR END	2	
5		624362001	FILTER ASSEMBLY-HYDRAULIC	1	
6		296300794	SCREW-HFS-.50-13X2.50-GR8-YZ	1	
7		296300851	NUT-HEXFLGTL-.50-13-G-YZ	1	
8		613818001	PLUG - 12M ORING HEX MAGNETIC	1	
9		296277699	RD BAR - NIPPPLE HYD. TANK FILTER	1	
10		235727001	SCREW-HCS-.38-16X1.00-GR8-YZ	1	
11		235725001	NUT - HEX - .38 - 16 - GR8 - YZ	1	
12		1802006	BOLT-10-24 X 3/4 RND HD STOVE	6	
13		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	5	
14		296293751	PLATE - FILTER HOLD DOWN	1	
15		296300922	SCREW-HFS-.38-16X50-GR8-YZ	2	
16		70000394	DECAL-VERMEER HY POWER	1	Domestic/International
17		59410001	FITTING-90-12MJ-12MORBA	3	
18		53837001	FITTING - 8M O-RING X 8M JIC 90 DEGREE	2	
19		59426001	FITTING - 90-6MJ-6MORBA	4	
20		67570001	FITTING - PLUG - 12MORB - HEX	1	
21		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	2	
22		267758001	INDICATOR - FLUID LEVEL W/TEMP	1	
23		296289830	COVER - 6" CLEAN-OUT, (FCC-06-YZ-BN)	1	
24		1580013	HOSE CLAMP - 2 1/2"	1	
25		296296142	FOAM - HYD TANK FRONT	1	
26		296294231	STRAINER - SUCTION 2" FNPT	2	
27	*	296292015	COVER - 10" OIL TANK	1	(S/N 112-)

Hydraulic Tank (S/N 101-111) Fig 6-1

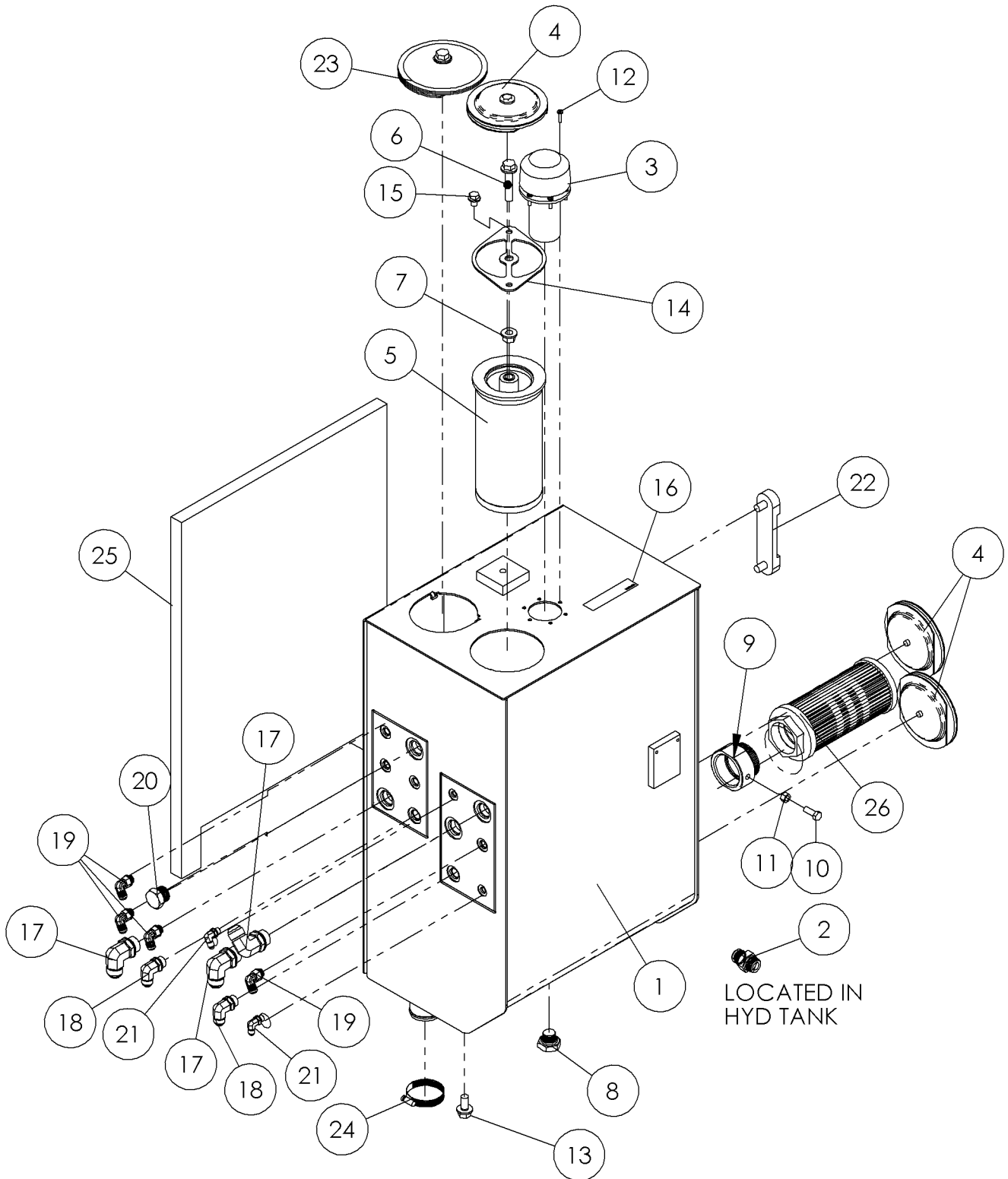


Illustration No. 296284454

## Hydraulic Tank (S/N 101-111) Fig 6-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288716	HYD TANK	1	
2		229396001	VALVE-85 PSI INLINE CHECK	1	
3		235808001	CAP-FILLER/BREATHER W/O RELIEF	1	
4		296257231	COVER - 6" RESERVOIR END	4	
5		624362001	FILTER ASSEMBLY-HYDRAULIC	1	
6		296300794	SCREW-HFS-.50-13X2.50-GR8-YZ	1	
7		296300851	NUT-HEXFLGTL-.50-13-G-YZ	1	
8		613818001	PLUG - 12M ORING HEX MAGNETIC	1	
9		296277699	RD BAR - NIPPPLE HYD. TANK FILTER	1	
10		235727001	SCREW-HCS-.38-16X1.00-GR8-YZ	1	
11		235725001	NUT - HEX - .38 - 16 - GR8 - YZ	1	
12		1802006	BOLT-10-24 X 3/4 RND HD STOVE	6	
13		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	5	
14		296293751	PLATE - FILTER HOLD DOWN	1	
15		296300922	SCREW-HFS-.38-16X50-GR8-YZ	2	
16		70000394	DECAL-VERMEER HY POWER	1	Domestic/International
17		59410001	FITTING-90-12MJ-12MORBA	3	
18		53837001	FITTING - 8M O-RING X 8M JIC 90 DEGREE	2	
19		59426001	FITTING - 90-6MJ-6MORBA	4	
20		67570001	FITTING - PLUG - 12MORB - HEX	1	
21		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	2	
22		267758001	INDICATOR - FLUID LEVEL W/TEMP	1	
23		296289830	COVER - 6" CLEAN-OUT, (FCC-06-YZ-BN)	1	
24		1580013	HOSE CLAMP - 2 1/2"	1	
25		296296142	FOAM - HYD TANK FRONT	1	
26		296294231	STRAINER - SUCTION 2" FNPT	1	

Pump Stack (S/N 128, 131-132, 134-) Fig 6-2r04

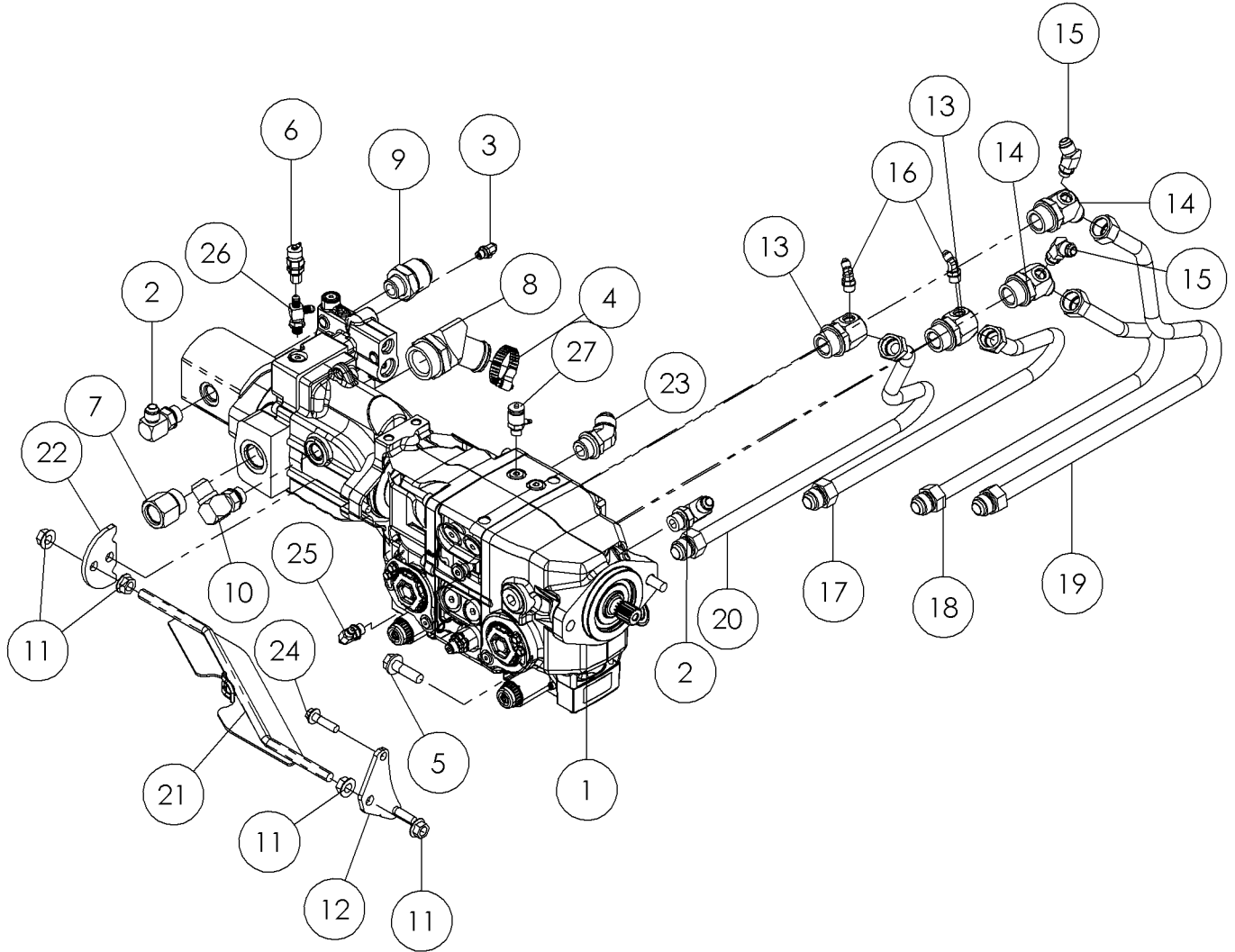


Illustration No. 296284444

## Pump Stack (S/N 128, 131-132, 134-) Fig 6-2r04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		296284443	PUMP STACK	1	Breakdown Fig. 6-2a Thru 6-2h (SN 127-), (SN 130-133), (SN 135-)
2		59407001	8M JICX10M ADJ. 90 DEG.ELBOW	2	
3		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	1	
4		1580009	HOSE CLAMP - 1 3/4"	1	
5		296300791	SCREW-HFS-.50-13X1.75-GR8-YZ	2	
6		83015001	FITTING-4F JIC DIAGNOSTIC	1	
7		71252001	FITTING - STR - 16MORB - 12FORB	1	
8		103998001	HOSE INSERT-24MX1 1/2 45 DEG.	1	
9		91878001	FIT-ADAPT 12M ORINGX20MJIC STR	1	
10		53871001	#10M O-RING X 12M JIC 90	1	(SN 135-)
11		296300899	NUT-HEX FLG-.50-13-GR8-YZ	4	
12		296294115	PLATE - PUMP SUPPORT	1	
13		296296070	FITTING - 45 - 16MORBA - 12MJ - 6MORB	2	
14		296296071	FITTING-45-16MORBA-12MJ-6MORB	2	
15		102667001	FITTING-45-8MJIC-6MORBA	2	
16		82931001	FITTING-45-4MJX6MORBA	2	
17		296296072	TUBE -.75X.109W HYDRO C	1	
18		296296073	TUBE -.75X.109W HYDRO B	1	
19		296296074	TUBE -.75 X.109W HYDRO A	1	
20		296296075	TUBE -.75X.109W HYDRO D	1	
21		296294190	WELDMENT-PUMP SUPPORT	1	
22		296294233	PLATE - PFC PUMP SUPPORT	1	
23		60718001	FITTING-45-12MJ-12MORBA	1	
24		296300940	SCREW-HFS-M10-1.25X40-10.9-YZ	2	
25		57950001	FITTING-90-4MJ-6MORBA	1	
26		82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	1	
27		72056001	FITTING-TEST-6MORB-16MTP	1	

Pump Stack Fig 6-2r03

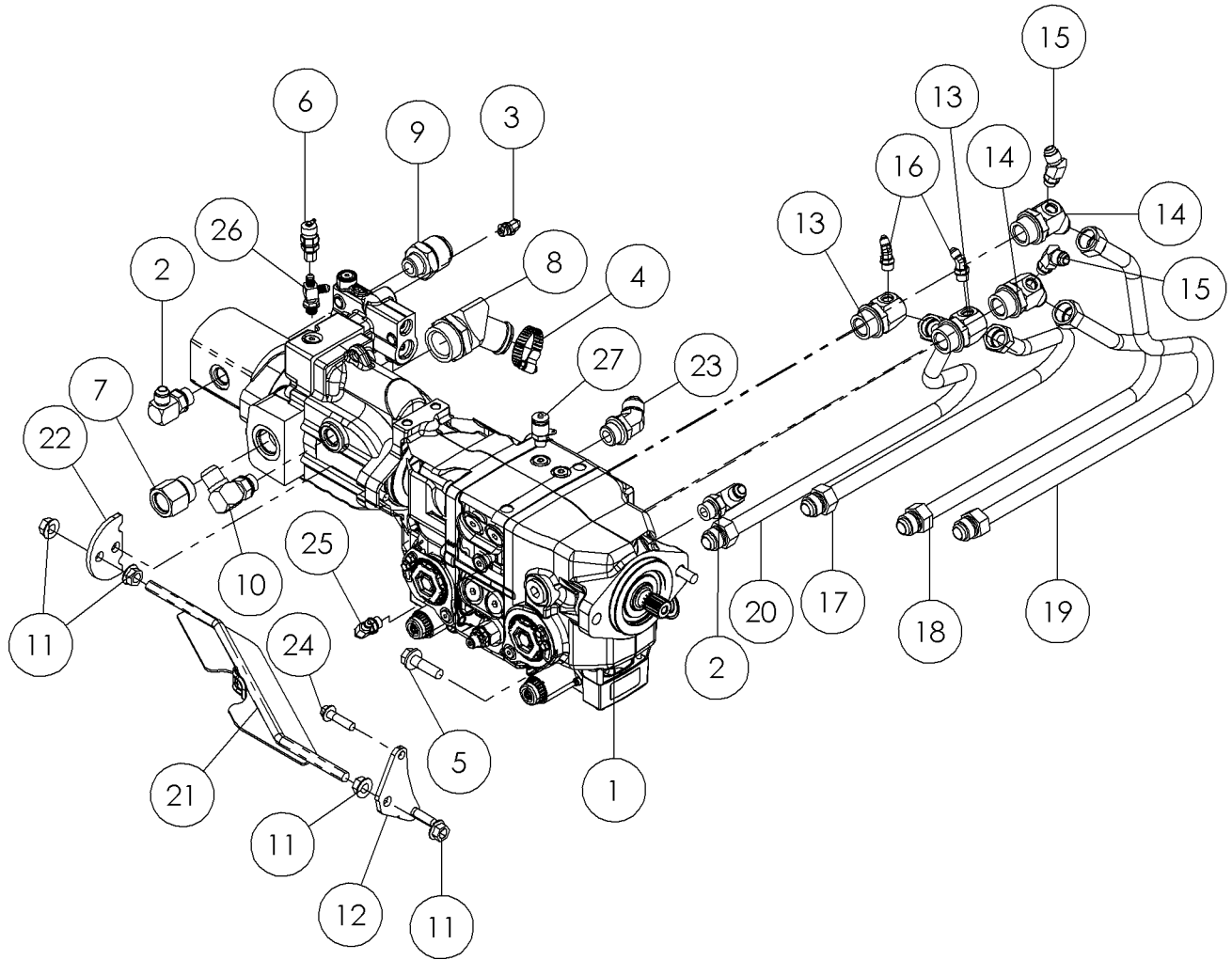


Illustration No. 296284444

## Pump Stack Fig 6-2r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		296284443	PUMP STACK	1	Breakdown Fig. 6-2a Thru 6-2h
2		59407001	8M JICX10M ADJ. 90 DEG.ELBOW	2	
3		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	1	
4		1580009	HOSE CLAMP - 1 3/4"	1	
5		296300791	SCREW-HFS-.50-13X1.75-GR8-YZ	2	
6	*	83015001	FITTING-4F JIC DIAGNOSTIC	1	
7		71252001	FITTING - STR - 16MORB - 12FORB	1	
8		103998001	HOSE INSERT-24MX1 1/2 45 DEG.	1	
9	*	91878001	FIT-ADAPT 12M ORINGX20MJIC STR	1	
10	*	53871001	#10M O-RING X 12M JIC 90	1	(SN 135-)
11		296300899	NUT-HEX FLG-.50-13-GR8-YZ	4	
12		296294115	PLATE - PUMP SUPPORT	1	
13		296296070	FITTING - 45 - 16MORBA - 12MJ - 6MORB	2	
14		296296071	FITTING-45-16MORBA-12MJ-6MORB	2	
15		102667001	FITTING-45-8MJIC-6MORBA	2	
16		82931001	FITTING-45-4MJX6MORBA	2	
17		296296072	TUBE -.75X.109W HYDRO C	1	
18		296296073	TUBE -.75X.109W HYDRO B	1	
19		296296074	TUBE -.75 X.109W HYDRO A	1	
20		296296075	TUBE -.75X.109W HYDRO D	1	
21		296294190	WELDMENT-PUMP SUPPORT	1	
22		296294233	PLATE - PFC PUMP SUPPORT	1	
23		60718001	FITTING-45-12MJ-12MORBA	1	
24		296300940	SCREW-HFS-M10-1.25X40-10.9-YZ	2	
25	*	57950001	FITTING-90-4MJ-6MORBA	1	
26		82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	1	
27	*	72056001	FITTING-TEST-6MORB-16MTP	1	

Pump Stack Fig 6-2r02

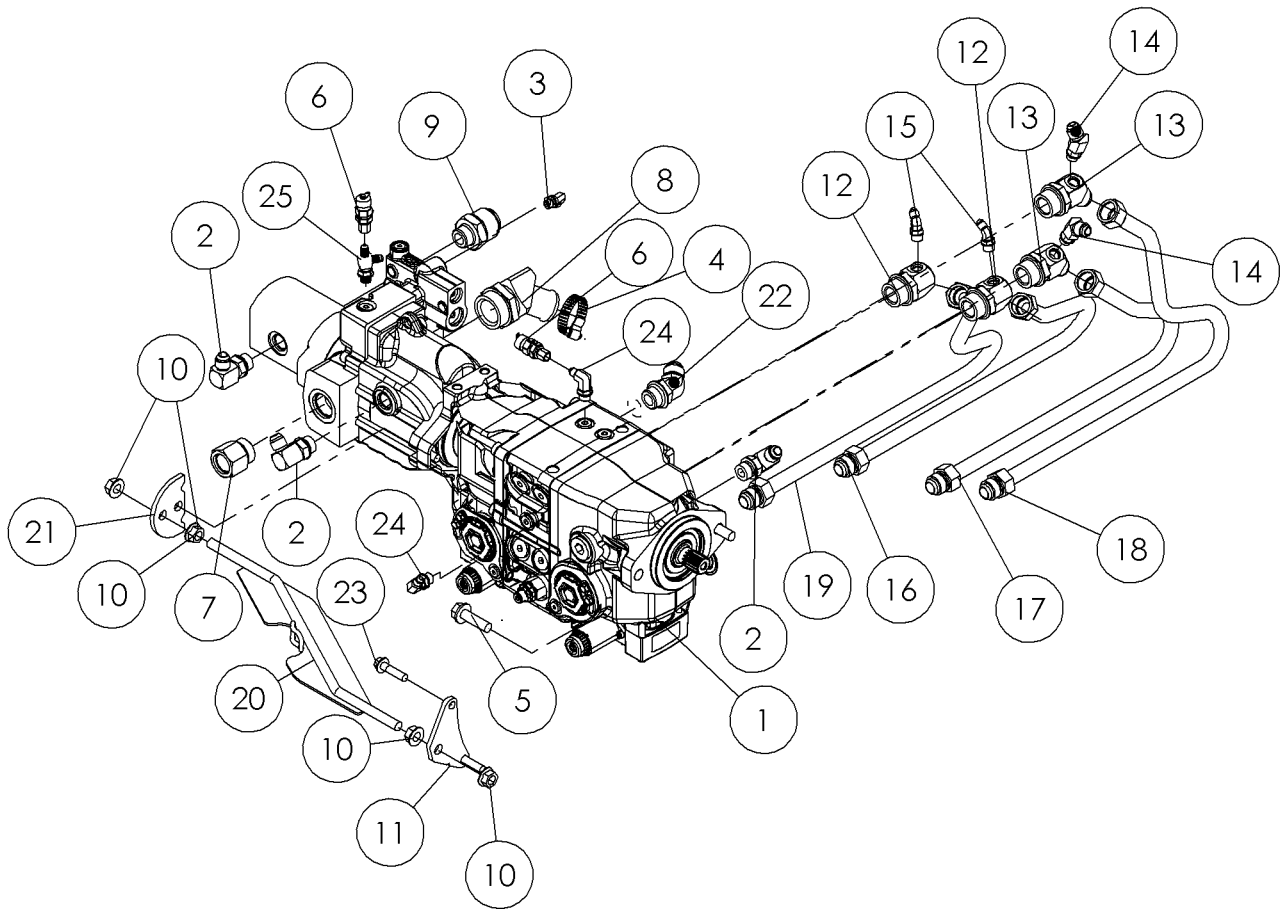


Illustration No. 296284444



## Pump Stack Fig 6-2r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296284443	PUMP STACK	1	Breakdown Fig. 6-2a Thru 6-2h
2		59407001	8M JICX10M ADJ. 90 DEG.ELBOW	3	
3		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	1	
4		1580009	HOSE CLAMP - 1 3/4"	1	
5		296300791	SCREW-HFS-.50-13X1.75-GR8-YZ	2	
6		83015001	FITTING-4F JIC DIAGNOSTIC	2	
7		71252001	FITTING - STR - 16MORB - 12FORB	1	
8		103998001	HOSE INSERT-24MX1 1/2 45 DEG.	1	
9	*	91878001	FIT-ADAPT 12M ORINGX20MJIC STR	1	
10		296300899	NUT-HEX FLG-.50-13-GR8-YZ	4	
11		296294115	PLATE - PUMP SUPPORT	1	
12		296296070	FITTING - 45 - 16MORBA - 12MJ - 6MORB	2	
13		296296071	FITTING-45-16MORBA-12MJ-6MORB	2	
14		102667001	FITTING-45-8MJIC-6MORBA	2	
15		82931001	FITTING-45-4MJX6MORBA	2	
16		296296072	TUBE -.75X.109W HYDRO C	1	
17		296296073	TUBE -.75X.109W HYDRO B	1	
18		296296074	TUBE -.75 X.109W HYDRO A	1	
19		296296075	TUBE -.75X.109W HYDRO D	1	
20		296294190	WELDMENT-PUMP SUPPORT	1	
21		296294233	PLATE - PFC PUMP SUPPORT	1	
22		60718001	FITTING-45-12MJ-12MORBA	1	
23		296300940	SCREW-HFS-M10-1.25X40-10.9-YZ	2	
24		57950001	FITTING-90-4MJ-6MORBA	2	
25		82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	1	

Pump Stack Fig 6-2r01

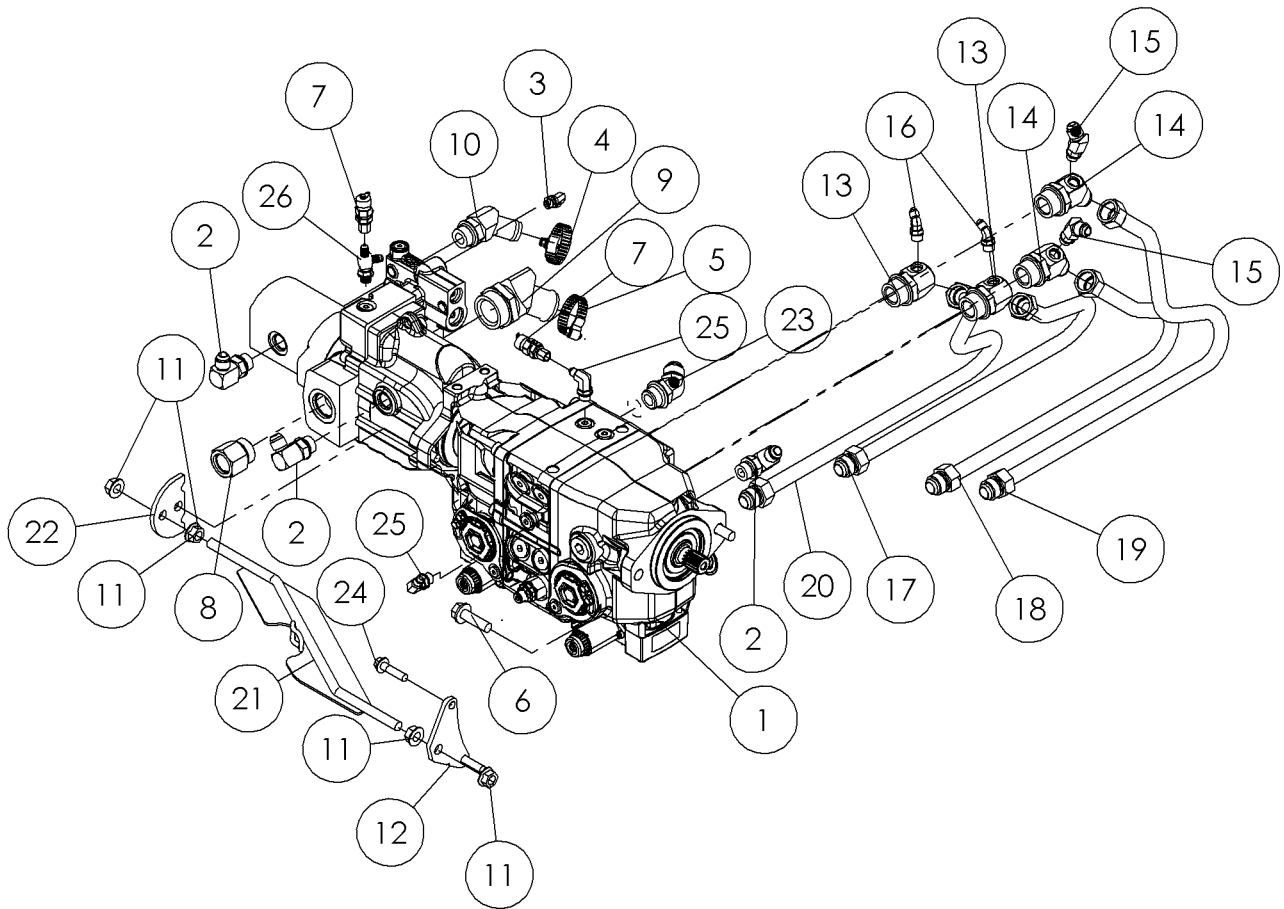


Illustration No. 296284444

## Pump Stack Fig 6-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Change Fittings
1		296284443	PUMP STACK	1	Breakdown Fig. 6-2a Thru 6-2h
2		59407001	8M JICX10M ADJ. 90 DEG.ELBOW	3	
3	*	59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	1	
4		1580007	HOSE CLAMP - 1 1/2"	1	
5		1580009	HOSE CLAMP - 1 3/4"	1	
6		296300791	SCREW-HFS-.50-13X1.75-GR8-YZ	2	
7		83015001	FITTING-4F JIC DIAGNOSTIC	2	
8		71252001	FITTING - STR - 16MORB - 12FORB	1	
9		103998001	HOSE INSERT-24MX1 1/2 45 DEG.	1	
10		296294139	FITTING - 45 DEG #12MORB X #16BHI	1	
11		296300899	NUT-HEX FLG-.50-13-GR8-YZ	4	
12		296294115	PLATE - PUMP SUPPORT	1	
13		296296070	FITTING - 45 - 16MORBA - 12MJ - 6MORB	2	
14		296296071	FITTING-45-16MORBA-12MJ-6MORB	2	
15		102667001	FITTING-45-8MJIC-6MORBA	2	
16		82931001	FITTING-45-4MJX6MORBA	2	
17		296296072	TUBE -.75X.109W HYDRO C	1	
18		296296073	TUBE -.75X.109W HYDRO B	1	
19		296296074	TUBE -.75 X.109W HYDRO A	1	
20		296296075	TUBE -.75X.109W HYDRO D	1	
21		296294190	WELDMENT-PUMP SUPPORT	1	
22		296294233	PLATE - PFC PUMP SUPPORT	1	
23		60718001	FITTING-45-12MJ-12MORBA	1	
24		296300940	SCREW-HFS-M10-1.25X40-10.9-YZ	2	
25		57950001	FITTING-90-4MJ-6MORBA	2	
26	*	82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	1	

Pump Stack Fig 6-2

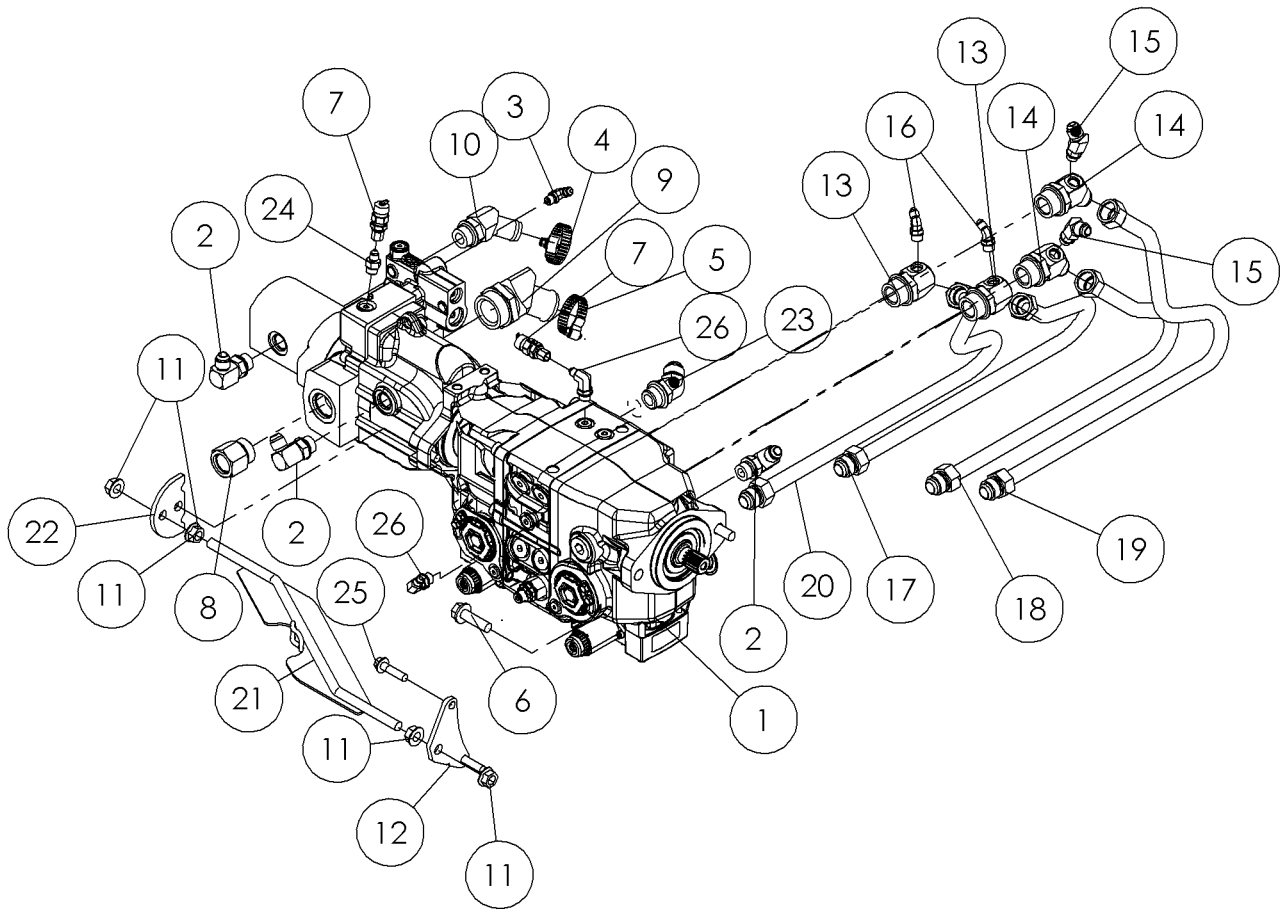
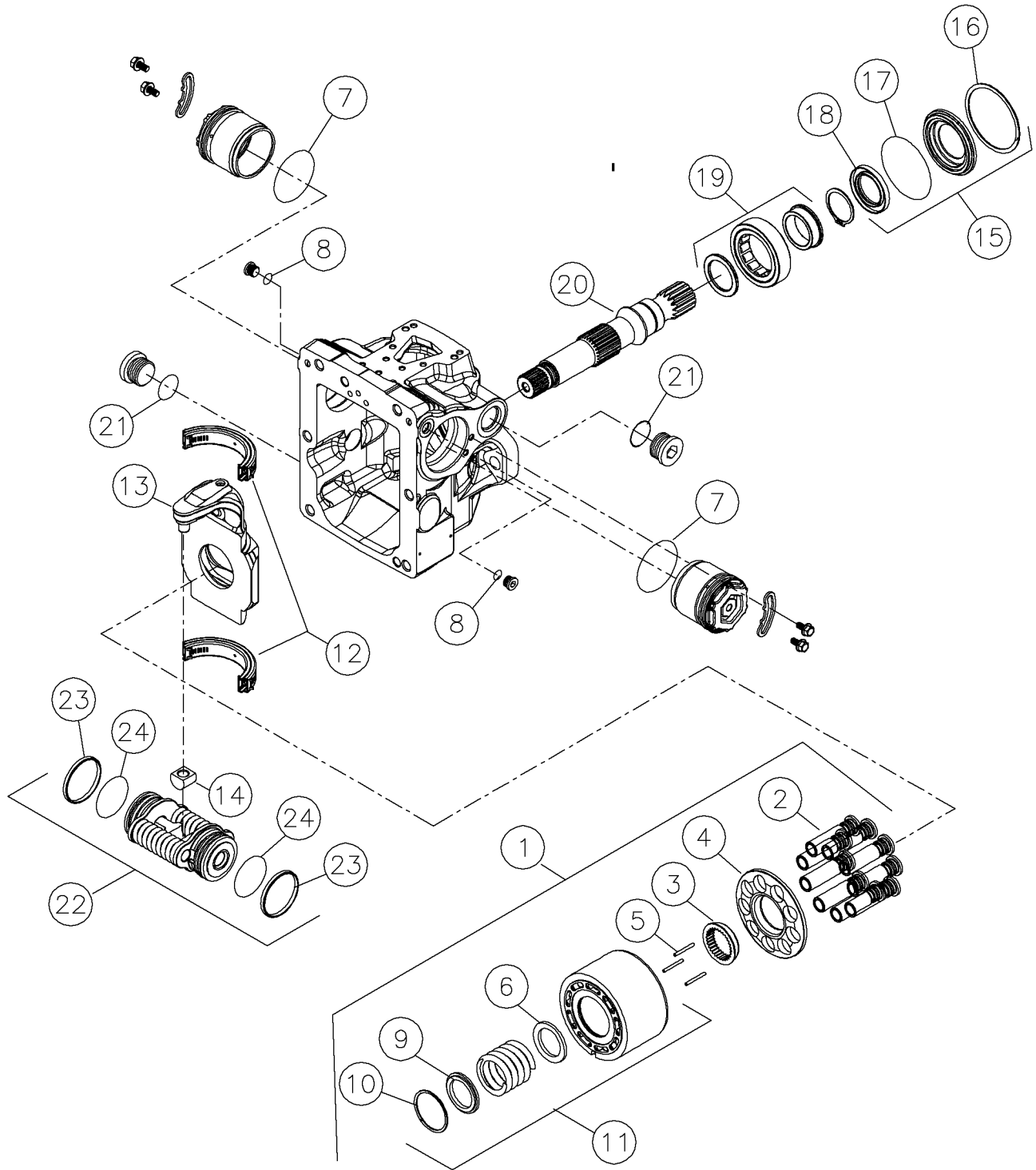


Illustration No. 296284444

## Pump Stack Fig 6-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Updated Weldment
1		296284443	PUMP STACK	1	Breakdown Fig. 6-2a Thru 6-2h
2		59407001	8M JICX10M ADJ. 90 DEG.ELBOW	3	
3		81343001	4M (BCH)X4M JICX4M JIC TEE	1	
4		1580007	HOSE CLAMP - 1 1/2"	1	
5		1580009	HOSE CLAMP - 1 3/4"	1	
6		296300791	SCREW-HFS-.50-13X1.75-GR8-YZ	2	
7		83015001	FITTING-4F JIC DIAGNOSTIC	2	
8		71252001	FITTING - STR - 16MORB - 12FORB	1	
9		103998001	HOSE INSERT-24MX1 1/2 45 DEG.	1	
10		296294139	FITTING - 45 DEG #12MORB X #16BHI	1	
11		296300899	NUT-HEX FLG-.50-13-GR8-YZ	4	
12		296294115	PLATE - PUMP SUPPORT	1	
13		296296070	FITTING - 45 - 16MORBA - 12MJ - 6MORB	2	
14		296296071	FITTING-45-16MORBA-12MJ-6MORB	2	
15		102667001	FITTING-45-8MJIC-6MORBA	2	
16		82931001	FITTING-45-4MJX6MORBA	2	
17		296296072	TUBE -.75X.109W HYDRO C	1	
18		296296073	TUBE -.75X.109W HYDRO B	1	
19		296296074	TUBE -.75 X.109W HYDRO A	1	
20		296296075	TUBE -.75X.109W HYDRO D	1	
21	*	296294190	WELDMENT-PUMP SUPPORT	1	
22		296294233	PLATE - PFC PUMP SUPPORT	1	
23		60718001	FITTING-45-12MJ-12MORBA	1	
24		57968001	FITTING-STR-4MJ-6MORB	1	
25		296300940	SCREW-HFS-M10-1.25X40-10.9-YZ	2	
26		57950001	FITTING-90-4MJ-6MORBA	2	

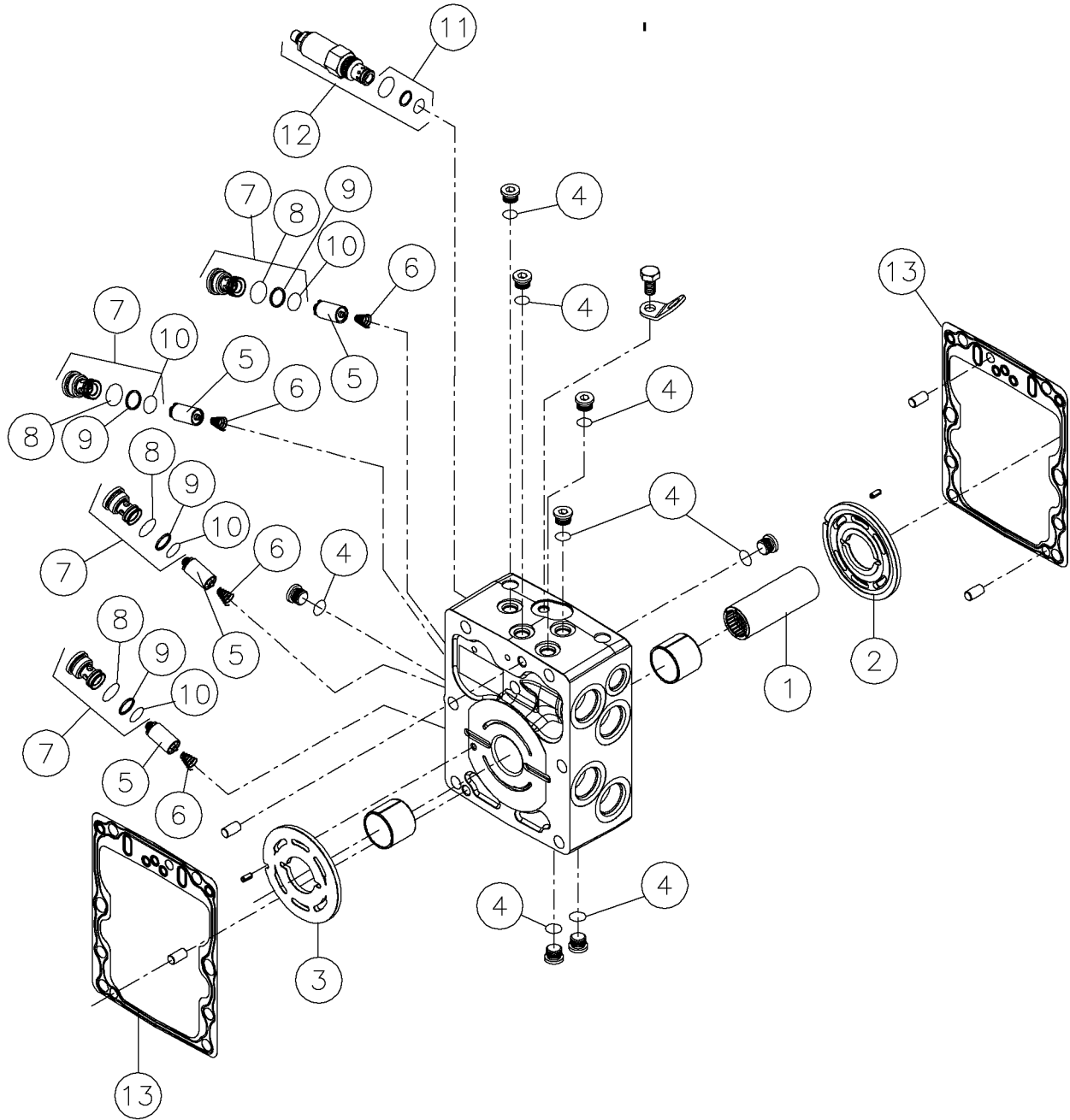
Components-Tandem Pump Fig 6-2z01



## Components-Tandem Pump Fig 6-2z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302324	CYLINDER BLOCK KIT	1	Inc. Ref.'s 2 Thru 6, And 9 And 10.
2		296302325	PISTON ASSY KIT	1	
3		296302326	SLIPPER RETAINER GUIDE	1	
4		296302327	SLIPPER RETAINER	1	
5		296302328	SLIPPER HOLD DOWN PIN	3	
6		296302329	WASHER	1	
7		296302374	O-RING	2	
8		78517007	O-RING	2	
9		296302330	WASHER	1	
10		296302331	RETAINING RING	1	
11		296302332	CYLINDER BLOCK ASSY	1	Inc. Ref.'s 6, 9, And 10.
12		296302333	SWASHPLATE BEARING KIT	2	
13		296302334	SWASHPLATE	1	
14		296302335	SLIDER BLOCK	1	
15		296302339	SHAFT SEAL	1	Inc. Ref.'s 16 Thru 18.
16		296302344	RETAINING RING	1	
17		296302343	O-RING	1	
18		296302342	LIP SEAL	1	
19		296302341	BALL BEARING	1	
20		296302340	SHAFT	1	
21		78518037	O-RING	2	
22		296302338	SERVO PISTON ASSY	1	Inc. Ref.'s 14, Two Of 23 And 24
23		296302337	PISTON RING	2	
24		296302336	O-RING	2	
		296284467	PUMP - TANDEM HYDRO 3.2 CID		Inc All Items In Figure 6-2a Thru 6-2e.
		296302352	OVERHAUL KIT		Inc. (Figure 6-2a, Ref.7, 8, 17, 18, 21, 23, And 24), (Figure 6-2b, Ref's 4, 8, 9, 10, And 13), (Figure 6-2c, Ref.'s 7, 14, 13, 14, 15, And 17), (Figure 6-2d, Ref.'s 2, 4, And 6), Figure 6-2e, Ref.'s 2, 4, And 6).

Components-Tandem Pump Fig 6-2z02

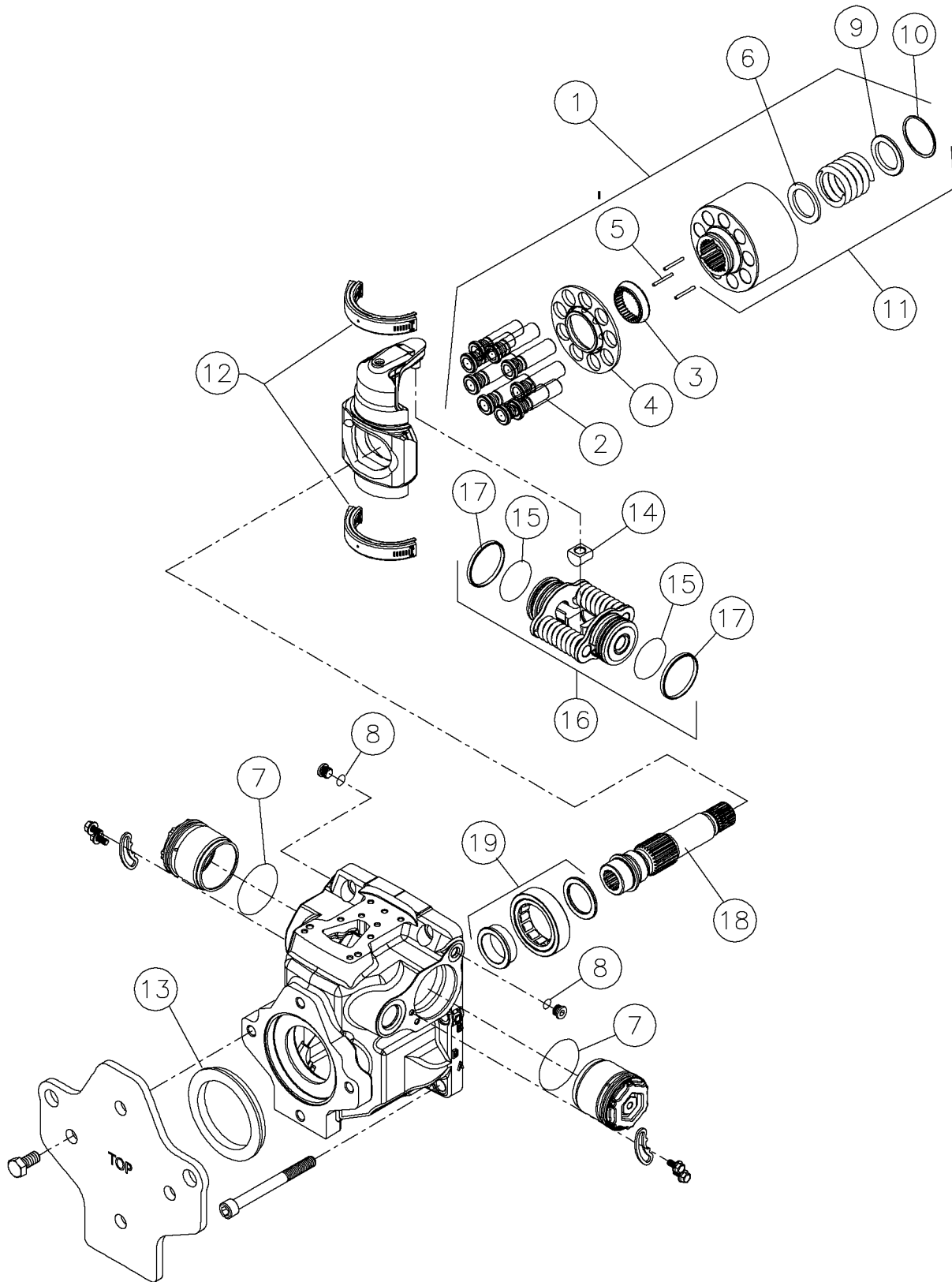




Components-Tandem Pump Fig 6-2z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302347	COUPLING	1	
2		296302348	VALVE PLATE CW	1	
3		296302350	VALVE PLATE CCW	1	
4		296278109	O-RING	8	
5		296302354	SCR VALVE ASSY	4	
6		296285113	SPRING	4	
7		296302353	SCR VALVE PLUG ASSY	4	Inc. Ref.'s 8 Thru 10
8		113080023	O-RING	4	
9		70027019	BACK-UP RING	4	
10		296302375	O-RING	4	
11		260609021	SEAL KIT	1	
12		296302351	CHARGE RELIEF VALVE KIT	1	
13		296302349	END CAP GASKET	2	
		296284467	PUMP - TANDEM HYDRO 3.2 CID		Inc. All Items In Figure 6-2a Thru 6-2e
		296302352	OVERHAUL KIT		Inc. (Figure 6-2a, Ref.7, 8, 17, 18, 21, 23, And 24), (Figure 6-2b, Ref's 4, 8, 9, 10, And 13), (Figure 6-2c, Ref.'s 7, 14, 13, 14, 15, And 17), (Figure 6-2d, Ref.'s 2, 4, And 6), Figure 6-2e, Ref.'s 2, 4, And 6).

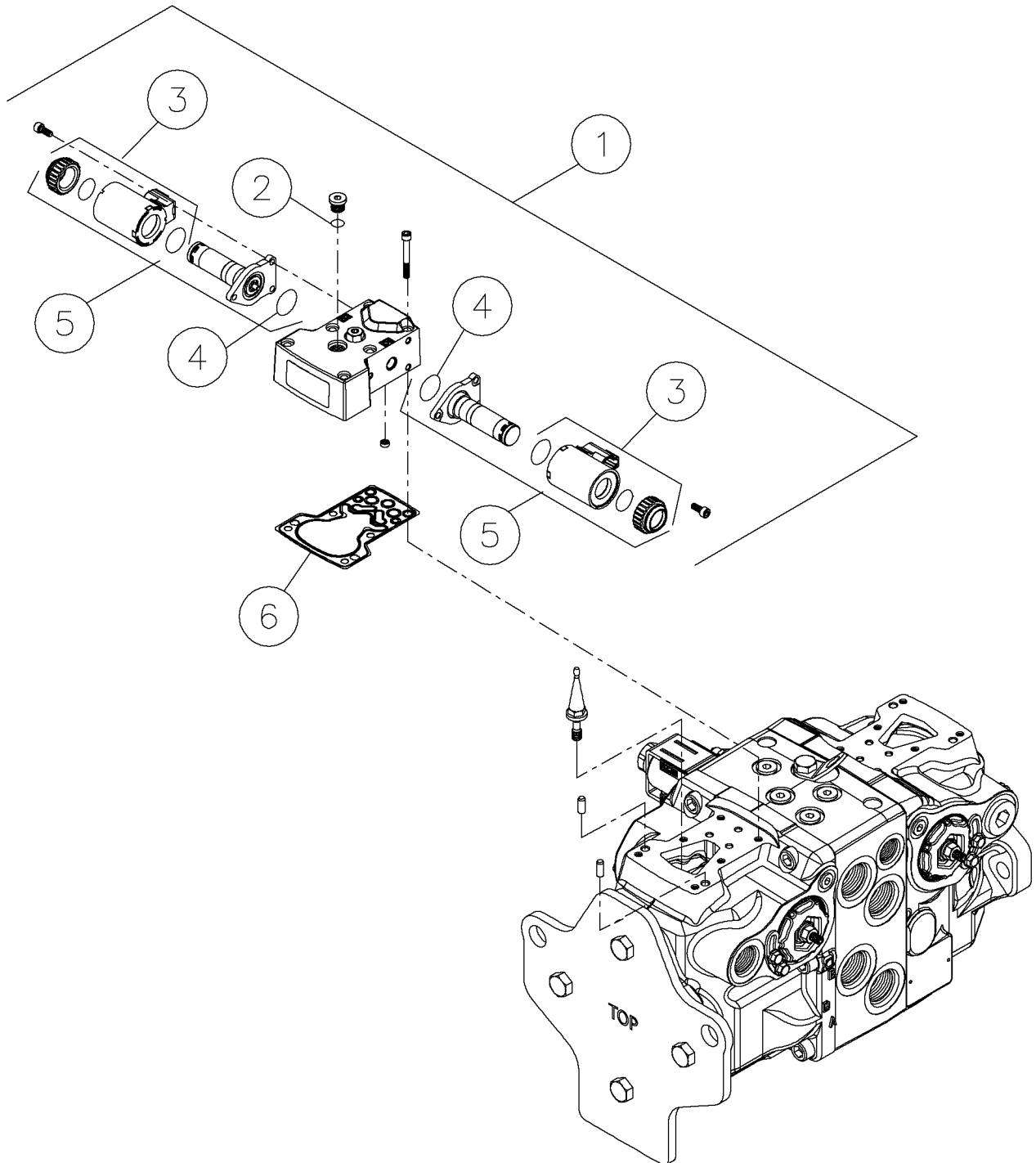
Components-Tandem Pump Fig 6-2z03



## Components-Tandem Pump Fig 6-2z03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302324	CYLINDER BLOCK KIT	1	Inc. Ref.'s 2 Thru 6, And 11.
2		296302325	PISTON ASSY KIT	1	
3		296302326	SLIPPER RETAINER GUIDE	1	
4		296302327	SLIPPER RETAINER	1	
5		296302328	SLIPPER HOLD DOWN PIN	3	
6		296302329	WASHER	1	
7		296302374	O-RING	2	
8		78517007	O-RING	2	
9		296302330	WASHER	1	
10		296302331	RETAINING RING	1	
11		296302332	CYLINDER BLOCK ASSY	1	Inc. Ref.'s 6, 9, And 10
12		296302333	SWASHPLATE BEARING KIT	2	
13		296302346	PAD SEAL	1	
14		296302335	SLIDER BLOCK	1	
15		296302336	O-RING	2	
16		296302338	SERVO PISTON ASSY	1	Inc. Ref.'s 14, 15, And 17.
17		296302337	PISTON RING	2	
18		296302345	SHAFT	1	
19		296302341	BALL BEARING	1	
		296284467	PUMP - TANDEM HYDRO 3.2 CID		Inc. All Items In Figure 6-2a Thru 6-2e
		296302352	OVERHAUL KIT		Inc. (Figure 6-2a, Ref.7, 8, 17, 18, 21, 23, And 24), (Figure 6-2b, Ref's 4, 8, 9, 10, And 13), (Figure 6-2c, Ref.'s 7, 14, 13, 14, 15, And 17), (Figure 6-2d, Ref.'s 2, 4, And 6), Figure 6-2e, Ref.'s 2, 4, And 6).

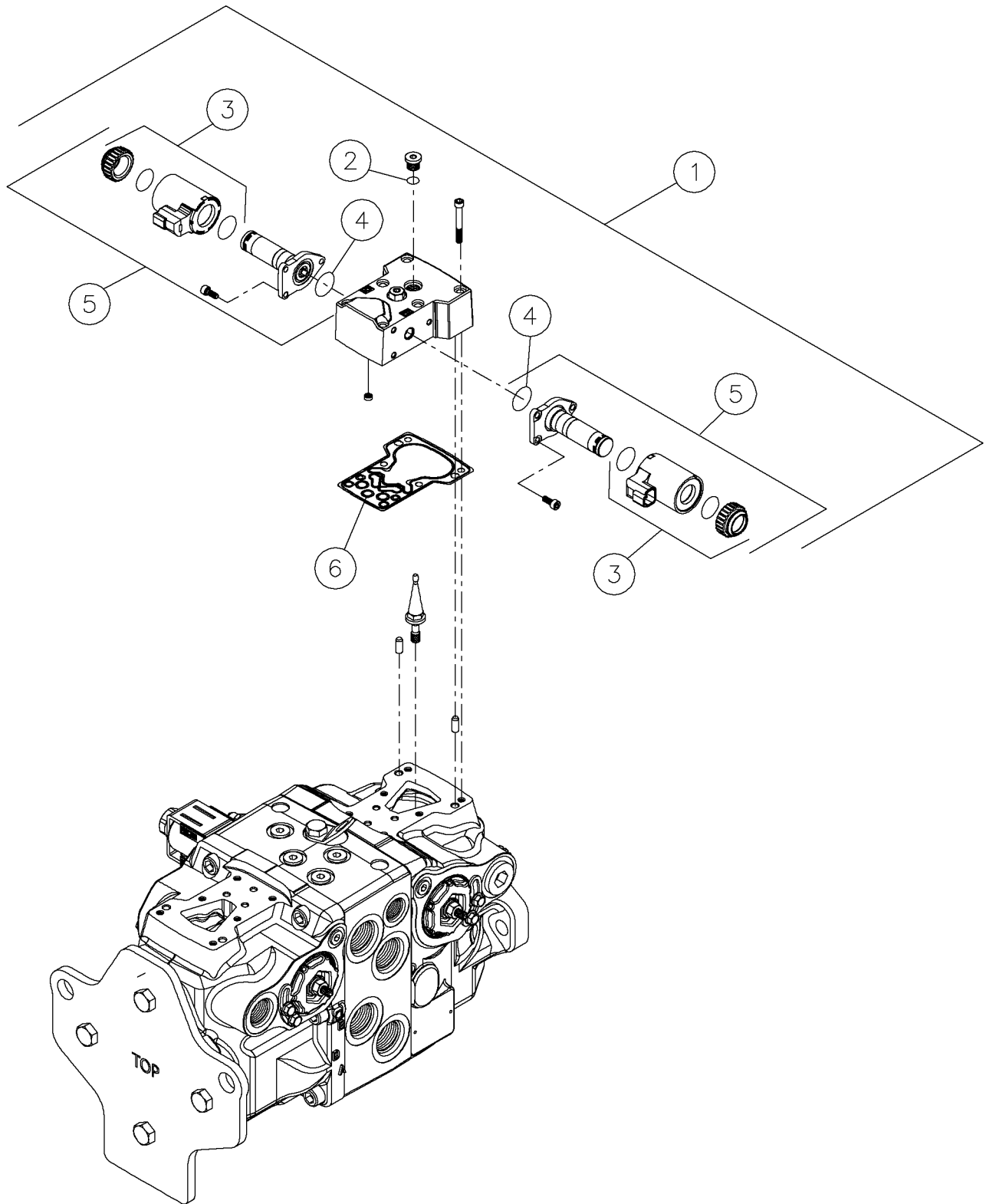
Components-Tandem Pump Fig 6-2z04



Components-Tandem Pump Fig 6-2z04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302355	EDC KIT - 12 VOLT	1	Inc. All Items In Figure.
2		78517007	O-RING	1	
3		296302356	COIL KIT	2	
4		296302357	O-RING	2	
5		296302358	SOLENOID VALVE - 12 VOLT	5	Inc. Ref.'s 3 And 4.
6		296302359	CONTROL GASKET	1	
		296284467	PUMP - TANDEM HYDRO 3.2 CID		Inc. All Items In Figures 6-2a Thru 6-2e.
		296302352	OVERHAUL KIT		Inc. (Figure 6-2a, Ref.7, 8, 17, 18, 21, 23, And 24), (Figure 6-2b, Ref's 4, 8, 9, 10, And 13), (Figure 6-2c, Ref.'s 7, 14, 13, 14, 15, And 17), (Figure 6-2d, Ref.'s 2, 4, And 6), Figure 6-2e, Ref.'s 2, 4, And 6).

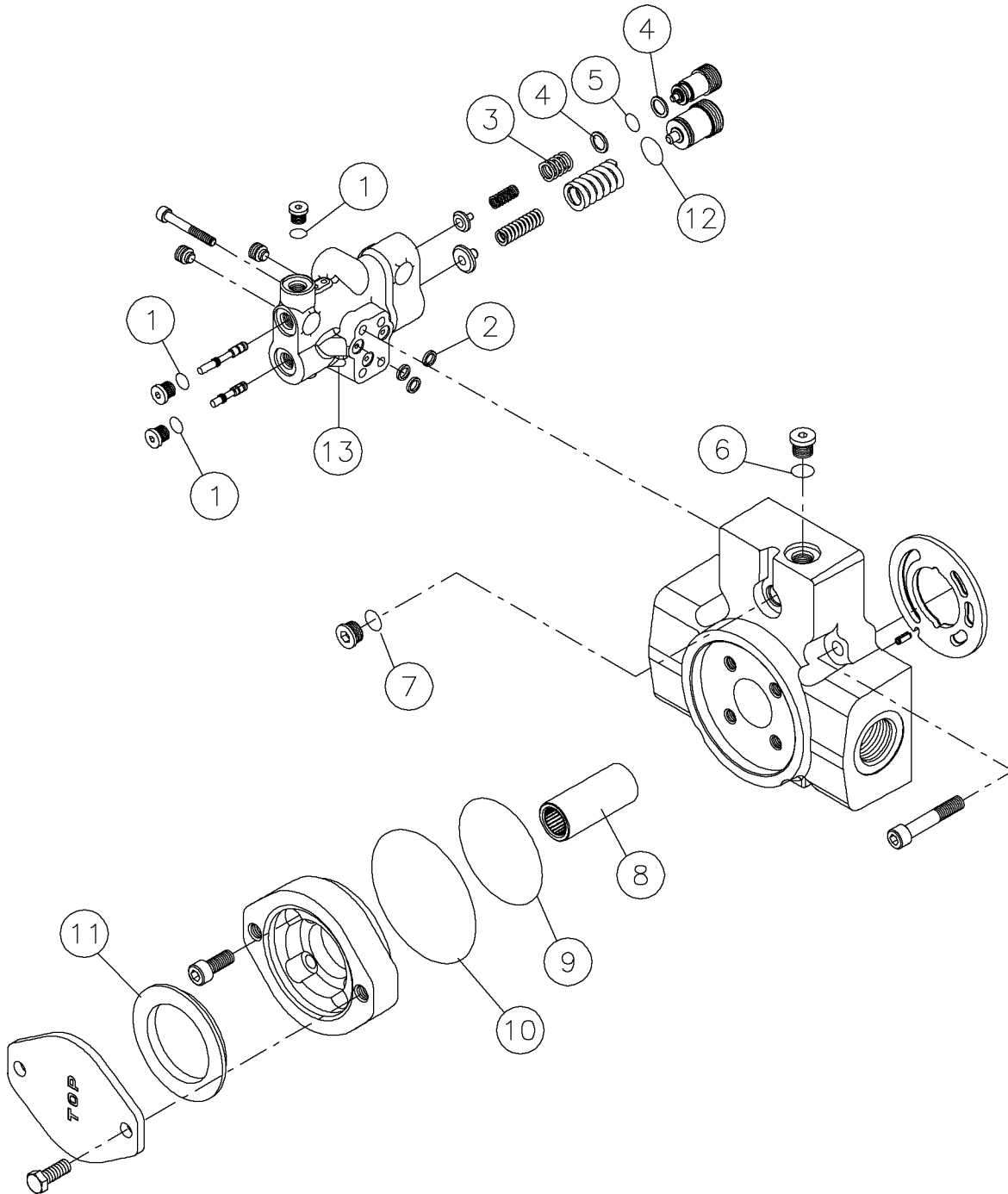
Components-Tandem Pump Fig 6-2z05



## Components-Tandem Pump Fig 6-2z05

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302355	EDC KIT - 12 VOLT	1	Inc. All Items In Figure.
2		78517007	O-RING	1	
3		296302356	COIL KIT	3	
4		296302357	O-RING	2	
5		296302358	SOLENOID VALVE - 12 VOLT	2	
6		296302359	CONTROL GASKET		
		296284467	PUMP - TANDEM HYDRO 3.2 CID		Inc. All Items In Figures 6-2a Thru 6-2e.
		296302352	OVERHAUL KIT		Inc. (Figure 6-2a, Ref.7, 8, 17, 18, 21, 23, And 24), (Figure 6-2b, Ref's 4, 8, 9, 10, And 13), (Figure 6-2c, Ref.'s 7, 14, 13, 14, 15, And 17), (Figure 6-2d, Ref.'s 2, 4, And 6), Figure 6-2e, Ref.'s 2, 4, And 6).

Components-PFC Pump Fig 6-2z06r01

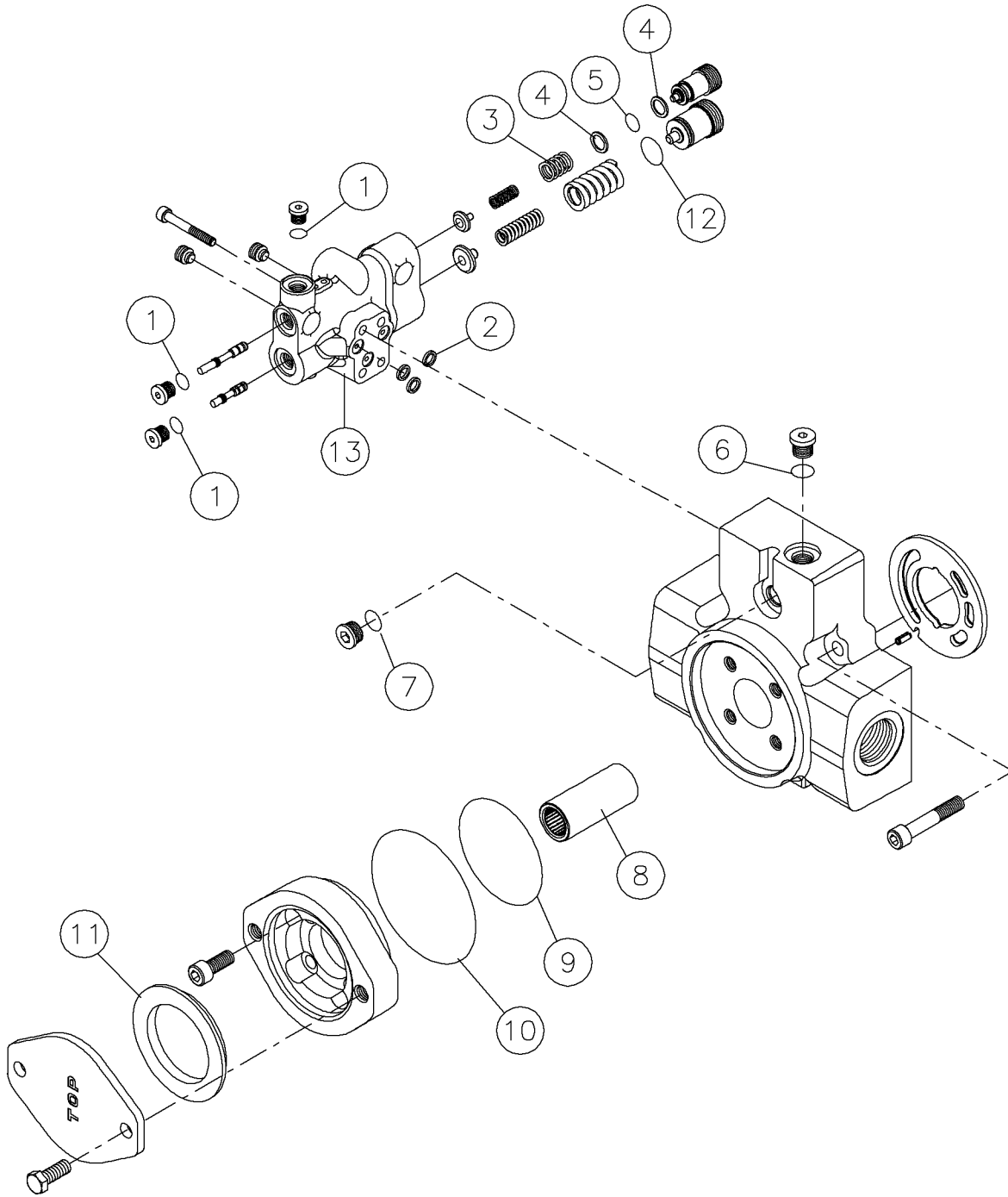




## Components-PFC Pump Fig 6-2z06r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		78517007	O-RING	3	
2		296265589	O - RING	3	
3		296302372	SPRING	1	
4		296281267	BACKUP RING	2	
5		296281266	O-RING	1	
6		296278109	O-RING	1	
7		206381011	O-RING	1	
8		296302373	COUPLING	1	
9		85627047	O-RING	1	
10		210493009	O-RING	1	
11		296271246	O-RING	1	
12	*	296281272	O-RING	1	
13		296302408	CONTROL KIT	1	Inc. Ref. 1, 2, 3, 4, 5, and 12.
	*	296296192	PUMP - PFC 45CC STRK LMTD 38CC		Inc. All Items In Figure 6-2f And 6-2g
		296285027	SEAL KIT		Inc. (Figure 6-2f, Ref.'s 8, 9, And 13), (Figure 6-2g, Ref.'s 1, 2, 4, 5, , 9, 10, And 11).

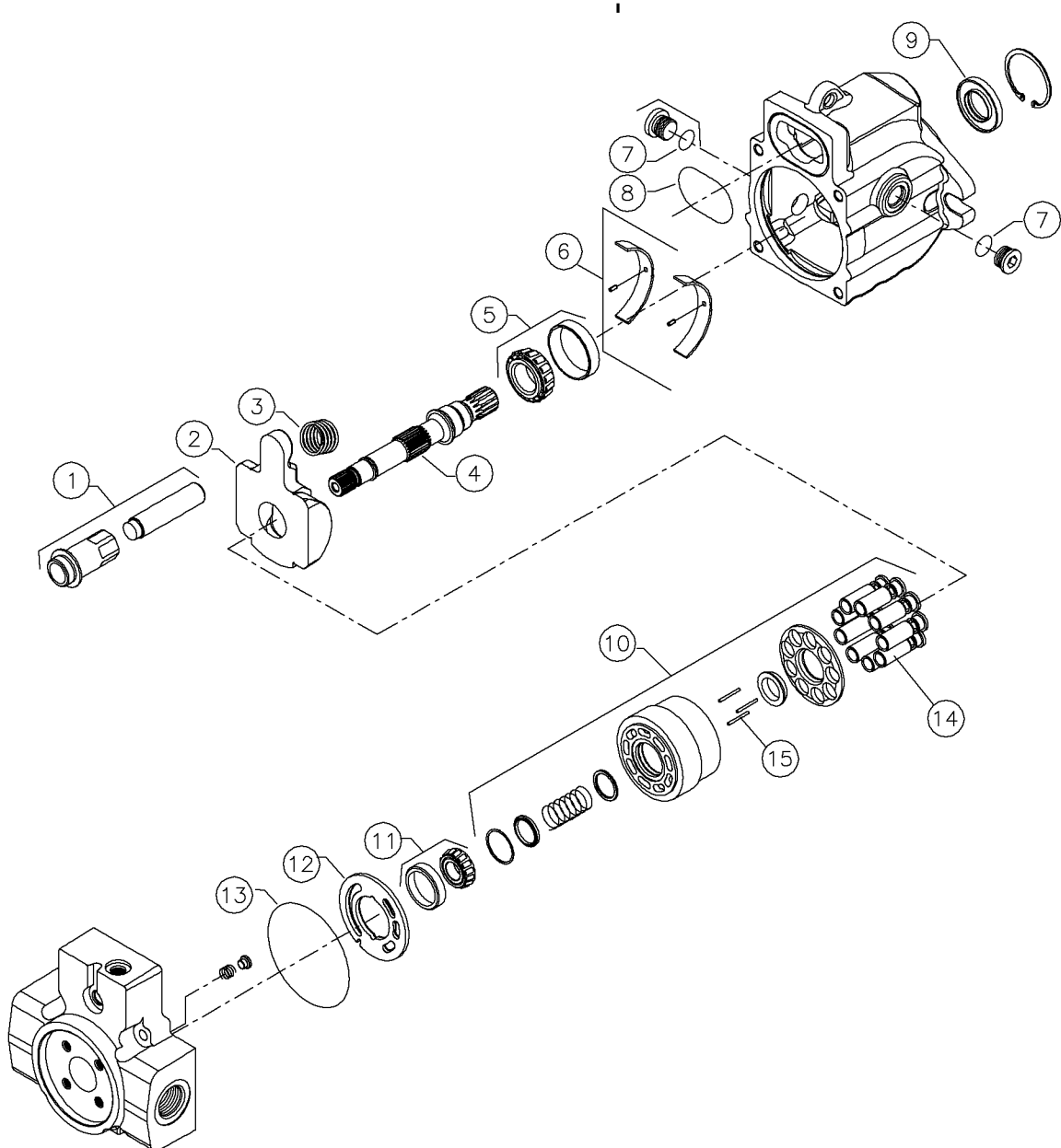
Components-PFC Pump Fig 6-2z06



## Components-PFC Pump Fig 6-2z06

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		78517007	O-RING	3	
2		296265589	O - RING	3	
3		296302372	SPRING	1	
4		296281267	BACKUP RING	2	
5		296281266	O-RING	1	
6		296278109	O-RING	1	
7		206381011	O-RING	1	
8		296302373	COUPLING	1	
9		85627047	O-RING	1	
10		210493009	O-RING	1	
11		296271246	O-RING	1	
12		296281271	ADJUSTING PLUG - PC	1	
13		296302408	CONTROL KIT	1	Inc. Ref.'s 1 Thru 5 And 12.
		296284468	PUMP - PFC 2.3 CID		Inc. All Items In Figure 6-2f And 6-2g
		296285027	SEAL KIT		Inc. (Figure 6-2f, Ref.'s 8, 9, And 13), (Figure 6-2g, Ref.'s 1, 2, 4, 5, , 9, 10, And 11).

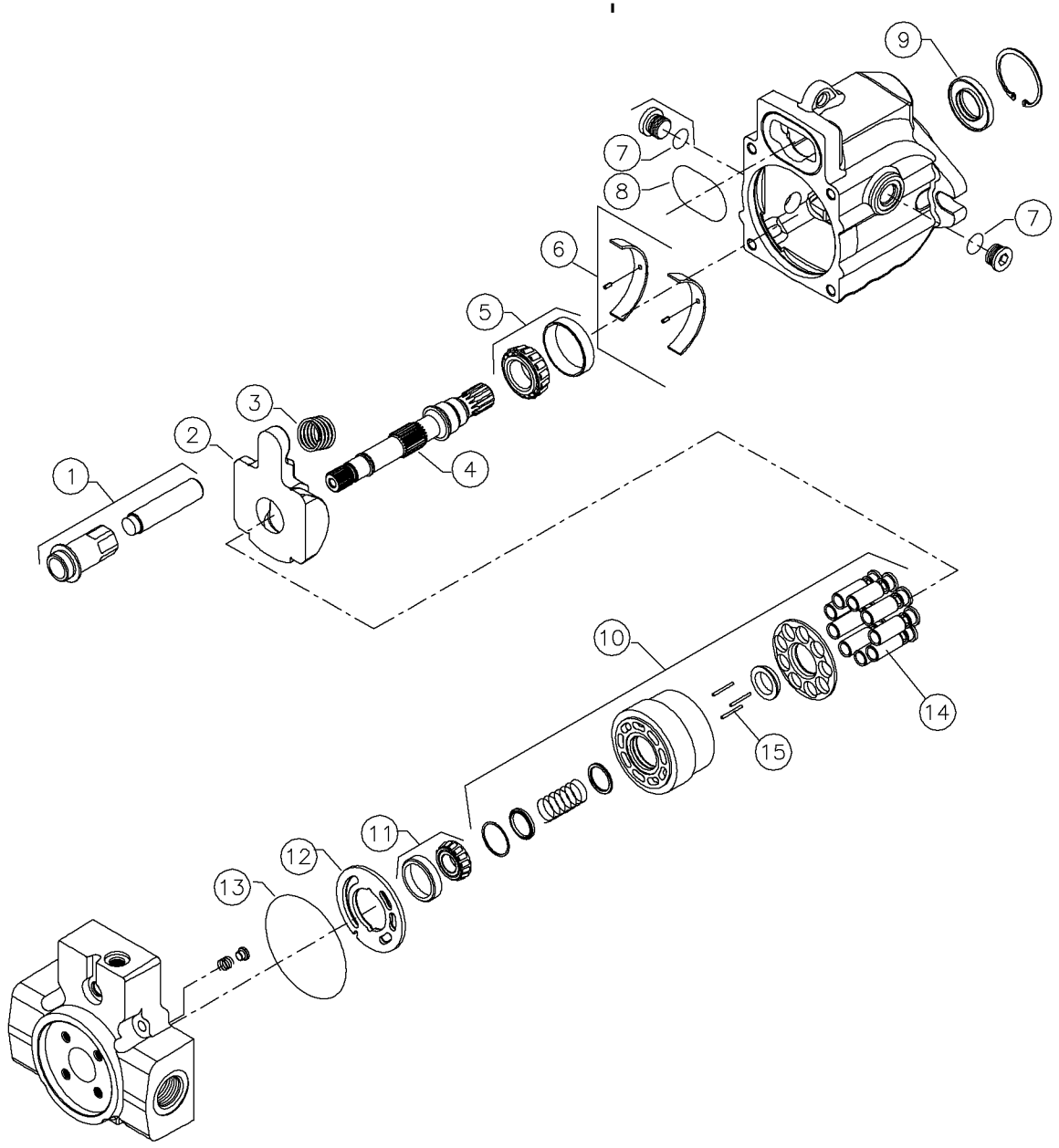
Components-PFC Pump Fig 6-2z07r01



## Components-PFC Pump Fig 6-2z07r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		296302360	SERVO PISTON KIT - 45CC	1	
2		296302361	SWASHPLATE	1	
3		296302362	BIAS SPRING	1	
4		296302363	SHAFT	1	
5		296302364	FRONT BEARING KIT	1	
6		296302365	SWASHPLATE BEARING KIT	1	
7		113080023	O-RING	2	
8		296302366	SERVO PISTON SEAL	1	
9		296265590	SEAL - SHAFT	1	
10	*	296284766	CYLINDER BLOCK KIT	1	
11		296302368	REAR BEARING KIT	1	
12		296302369	VALVE PLATE	1	
13		296302370	O-RING	1	
14		296302371	PISTON ASSY	1	
15		296302328	SLIPPER HOLD DOWN PIN	1	
	*	296296192	PUMP - PFC 45CC STRK LMTD 38CC		Inc. All Items In Figure 6-2f And 6-2g.
		296285027	SEAL KIT		Inc. (Figure 6-2f, Ref's 8, 9, And 13), (Figure 6-2g, Ref's 1, 2, 4, 5, , 9, 10, And 11).

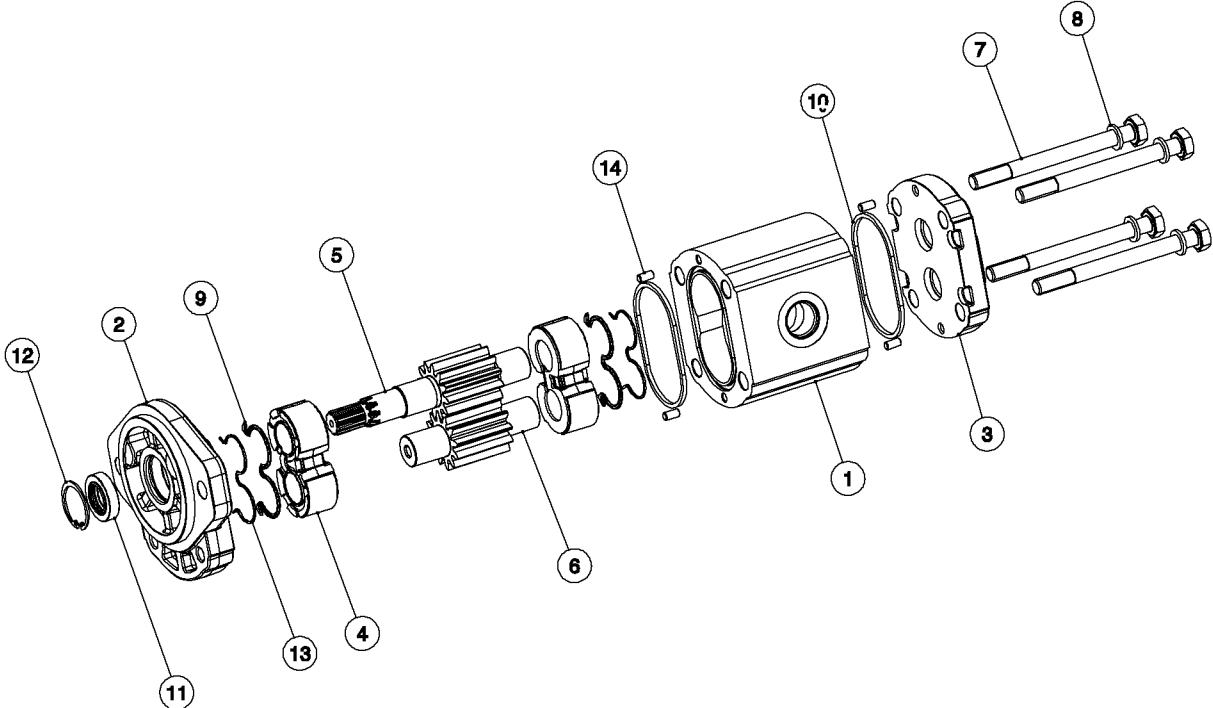
Components-PFC Pump Fig 6-2z07



## Components-PFC Pump Fig 6-2z07

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302360	SERVO PISTON KIT - 45CC	1	
2		296302361	SWASHPLATE	1	
3		296302362	BIAS SPRING	1	
4		296302363	SHAFT	1	
5		296302364	FRONT BEARING KIT	1	
6		296302365	SWASHPLATE BEARING KIT	1	
7		113080023	O-RING	2	
8		296302366	SERVO PISTON SEAL	1	
9		296265590	SEAL - SHAFT	1	
10		296302367	CYLINDER BLOCK KIT	1	
11		296302368	REAR BEARING KIT	1	
12		296302369	VALVE PLATE	1	
13		296302370	O-RING	1	
14		296302371	PISTON ASSY	1	
15		296302328	SLIPPER HOLD DOWN PIN	1	
		296284468	PUMP - PFC 2.3 CID		Inc. All Items In Figure 6-2f And 6-2g.
		296285027	SEAL KIT		Inc. (Figure 6-2f, Ref.'s 8, 9, And 13), (Figure 6-2g, Ref.'s 1, 2, 4, 5, , 9, 10, And 11).

Components-Gear Pump Fig 6-2z08





## Components-Gear Pump Fig 6-2z08

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	BODY	1	Not Sold Separately
2		NSS	FRONT COVER	1	Not Sold Separately
3		NSS	REAR COVER	1	Not Sold Separately
4		NSS	THRUST PLATE	2	Not Sold Separately
5		NSS	DRIVE SHAFT	1	Not Sold Separately
6		NSS	DRIVEN GEAR	1	Not Sold Separately
7		NSS	SCREW-10 X 115	4	Not Sold Separately
8		NSS	WASHER-10.5 X 16 X2	4	Not Sold Separately
9		NSS	SEAL	2	Not Sold Separately
10		NSS	STANDARD SEAL	2	Not Sold Separately
11		NSS	SHAFT SEAL	1	Not Sold Separately
12		NSS	SNAP RING	1	Not Sold Separately
13		NSS	BACK-UP RING	2	Not Sold Separately
14		NSS	DOWEL PIN	4	Not Sold Separately
		296294197	PUMP - GEAR 1.61 CID		Inc. All Items In Figure
		296302377	SEAL KIT		

Charge Filter Fig 6-3

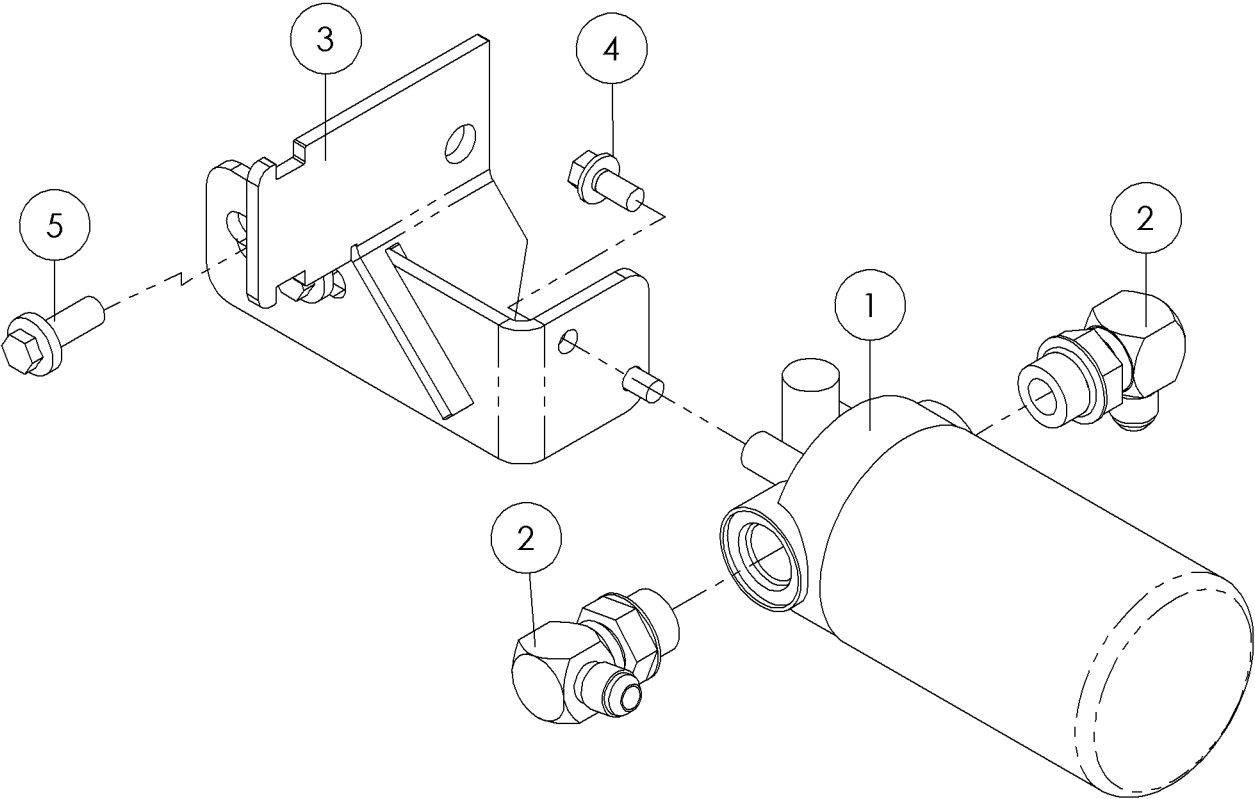


Illustration No. 296294191

## Charge Filter Fig 6-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		230520001	FILTER ASSY-OIL	1	
		81902001	FILTER-OIL	1	Replacement Filter
2		57949001	FITTING-12MX8M JIC 90 DEG. EL.	2	
3		296306007	WELDMENT - CHARGE FILTER	1	
4		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
5		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	2	

Torque Limiter Valve Fig 6-4r01

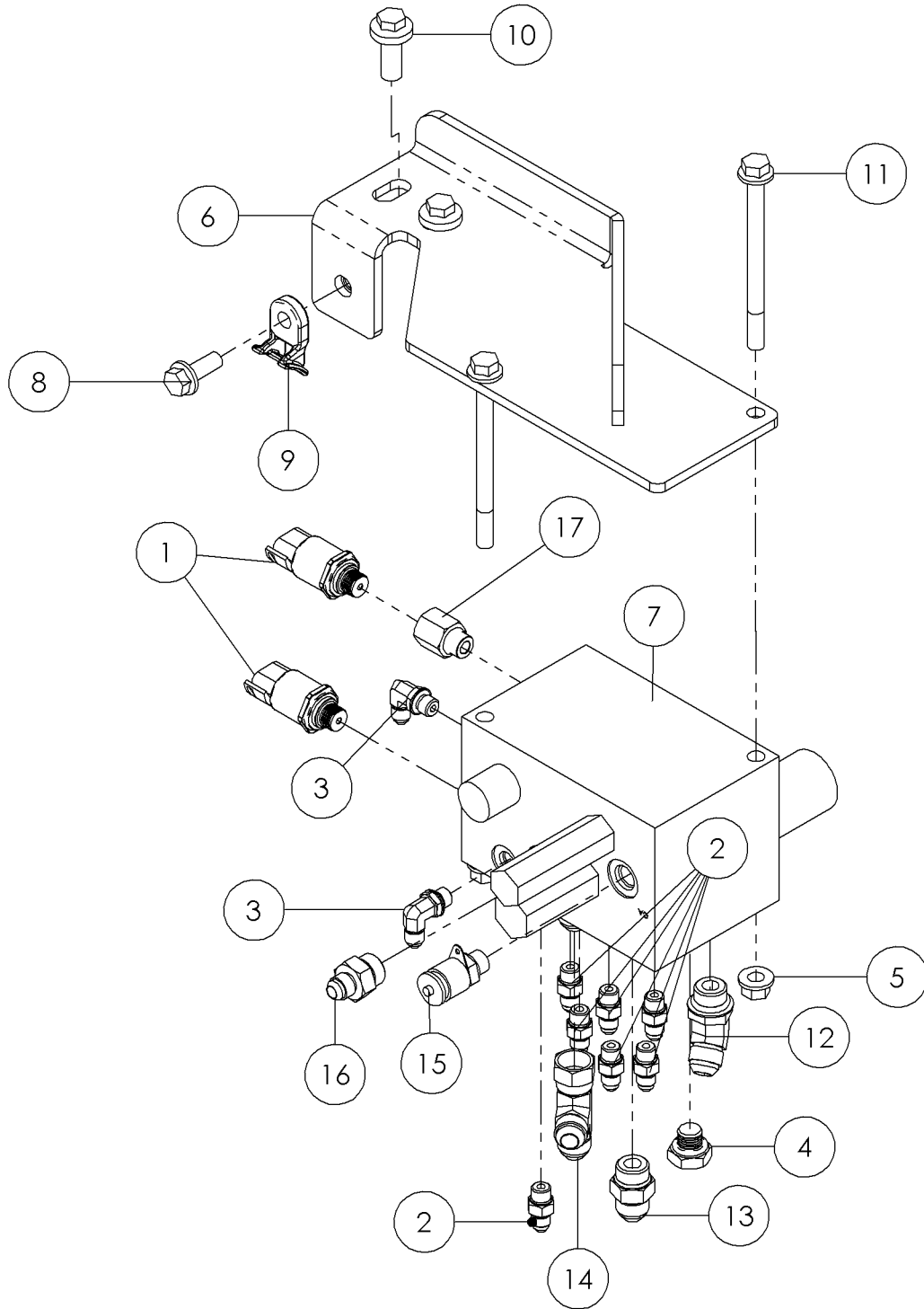


Illustration No. 296284465

## Torque Limiter Valve Fig 6-4r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Update In Illustration & Parts List.
1		296276082	TRANSDUCER 6000 PSI HYDAC	2	
2		60908001	FITTING-4MX4M JIC STR ADAPTER	7	
3		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	2	
4		5553001	FITTING - PLUG - 6MORB - HEX	1	
5		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	
6		296294192	WELDMENT-CHARGE FILTER MOUNT	1	
7		296291825	VALVE - TORQUE LIMITER/LOOP FLUSH	1	Breakdown Fig. 6-4a
8		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
9		296276018	MOUNT HELLER MANN TITON	1	
10		296300942	SCREW -HFS-M12-1.25X30-10.9-YZ-DIN6921	2	
11		296300920	SCREW-HFS-.38-16X4.75-GR8-YZ	2	
12		53834001	#8M O-RING-#8M JIC 45 DEG.	1	
13		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
14		59461001	8 JIC SW RUN TEE	1	
15		72056001	FITTING-TEST-6MORB-16MTP	1	
16		60247001	FITTING - 8M O-RING X 6M JIC ST.	1	
17		296290307	FITTING-STR-6MORB-6FORB	1	

Torque Limiter Valve Fig 6-4

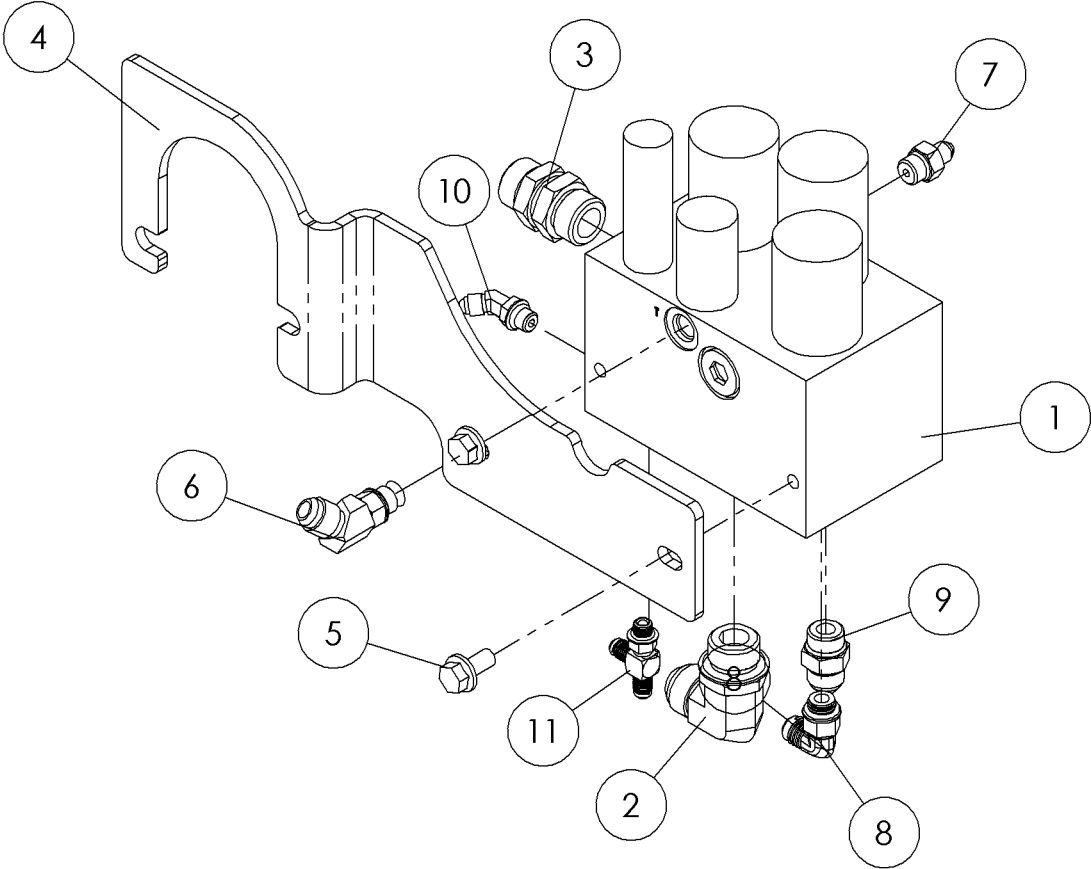
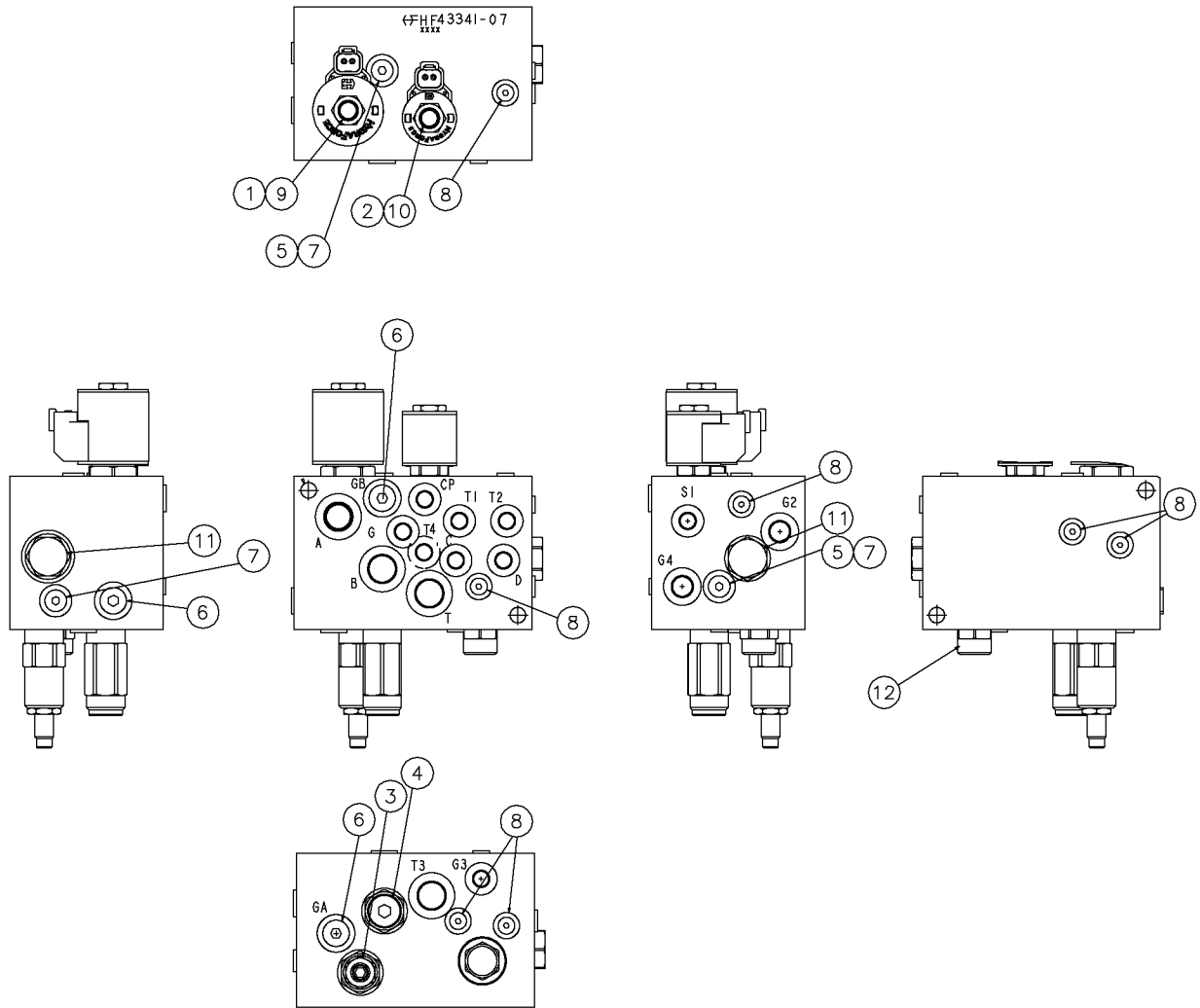


Illustration No. 296291821

## Torque Limiter Valve Fig 6-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1		296291824	VALVE - DIVERTER/WATER	1	Breakdown Fig. 6-4a
2		59410001	FITTING-90-12MJ-12MORBA	1	
3		712001	12 M HEX NIPPLE	1	
4		296294141	PLATE - WATER/DRILL VALVE MOUNT	1	
5		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
6		102667001	FITTING-45-8MJIC-6MORBA	1	
7		57968001	FITTING-STR-4MJ-6MORB	1	
8		59426001	FITTING - 90-6MJ-6MORBA	1	
9		53824001	FITTING-#8M O-RING-#8M JIC ST.	1	
10		58295001	FITTING-4M OR X 4M JIC 45 DEG.	1	
11		81342001	FITTING-RTEE-4MJ-4MORBA-4MJ	1	
12	*	67263001	FITTING - PLUG - 4MORB - HEX	1	

Components-Torque Limiter Valve Fig 6-4z01





Components-Torque Limiter Valve Fig 6-4z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Correct Parts List.
1		296272890	CARTRIDGE (NO COIL)	1	
		296278003	SEAL KIT	1	
2		296272930	SOLENOID VALVE	1	
		161159001	SEAL KIT	1	
3	*	296302274	RELIEF VALVE	1	
		251117013	SEAL KIT	1	
4	*	296302275	RELIEF VALVE	1	
		296302276	SEAL KIT	1	
5		296302278	CHECK VALVE	2	
		180007018	KIT-SEAL	1	
6		500659021	SAE PLUG	3	
7		240324011	PLUG-SAE	3	
8		240324015	PLUG-SAE	7	
9		296265644	COIL	1	
10		296271115	COIL	1	
11		296302279	SHUTTLE VALVE	2	
		296265599	SEAL KIT	1	
12		296302277	CARTRIDGE VALVE	1	
		296251056	SEAL KIT	1	
		296291825	VALVE - TORQUE LIMITER/LOOP FLUSH		Inc. All Items In Figure.

Hose Carrier (S/N 193-) Fig 6-5r01

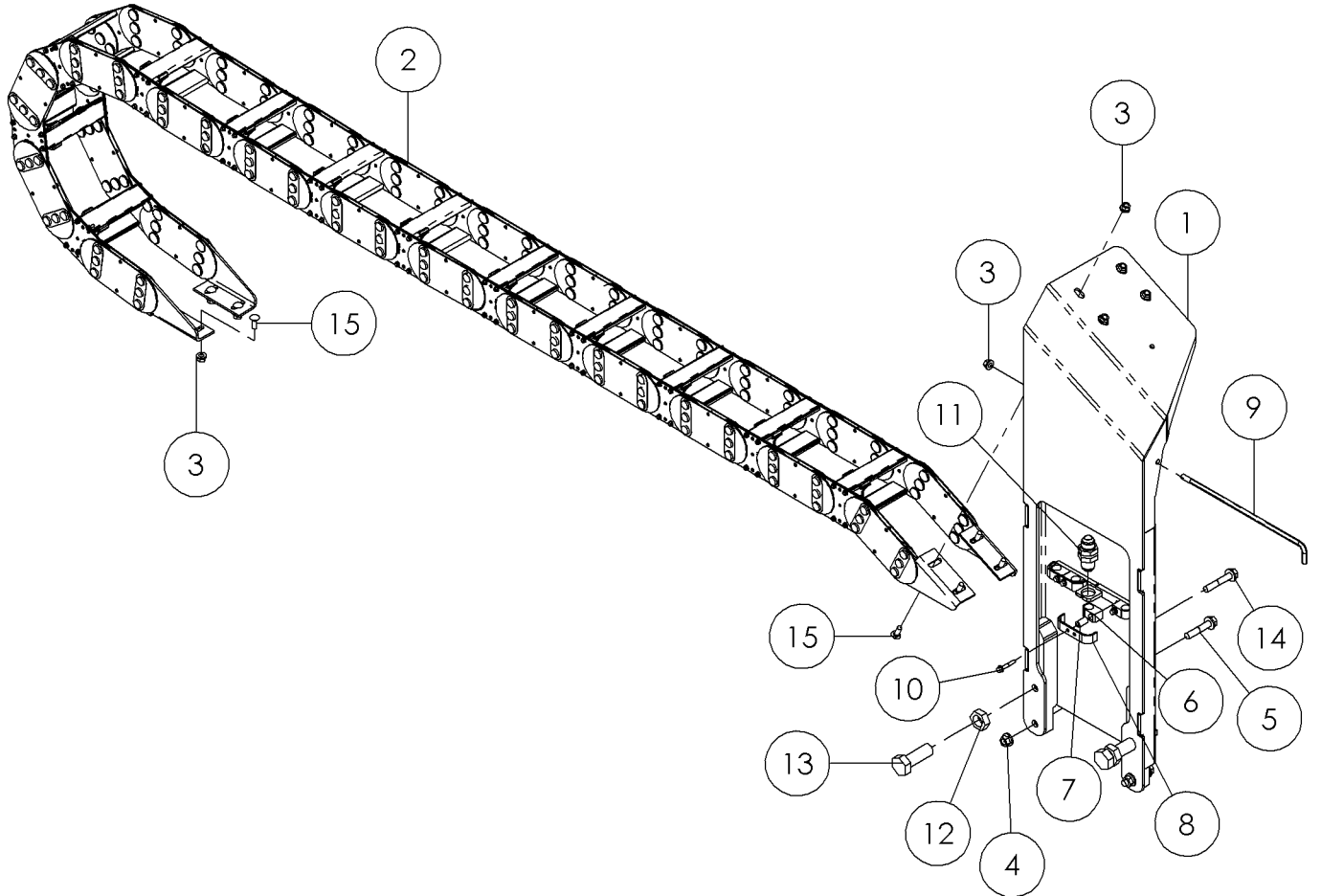


Illustration No. 296306359

## Hose Carrier (S/N 193-) Fig 6-5r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306360	MOUNT - HOSE CARRIER	1	(SN 193-)
2		296306357	CARRIER - HOSE	1	Breakdown Fig. 6-5z01 (SN 193-)
3		296300850	NUT-HEXFLGTL-.38-16-G-YZ	9	
4		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
5		296300794	SCREW-HFS-.50-13X2.50-GR8-YZ	2	
6		296296128	CLAMP - TUBE ISOLATOR	4	
7		296296126	BUSHING - TUBE CLAMP	4	
8		296296127	PLATE - CLAMP COVER	2	
9		296296129	ROD - HOSE CARRIER	1	
10		296300756	SCREW-HFS-.25-20X1.50-GR8-YZ	4	
11		201485001	12M JIC X 12M JIC BULKHEAD STR	1	
12		75392001	NUT-1-UNC-GR.8 HEX JAM	2	
13		296296130	SCREW-HSC-1.00-8X2.75X.50-12X1.00GR8-YZ	2	
14		296300795	SCREW-HFS-.50-13X2.75-GR8-YZ	2	
15		375010	*BOLT-3/8"-16X1"GD#5 CARRIAGE	8	

Hose Carrier (S/N 101-192) Fig 6-5

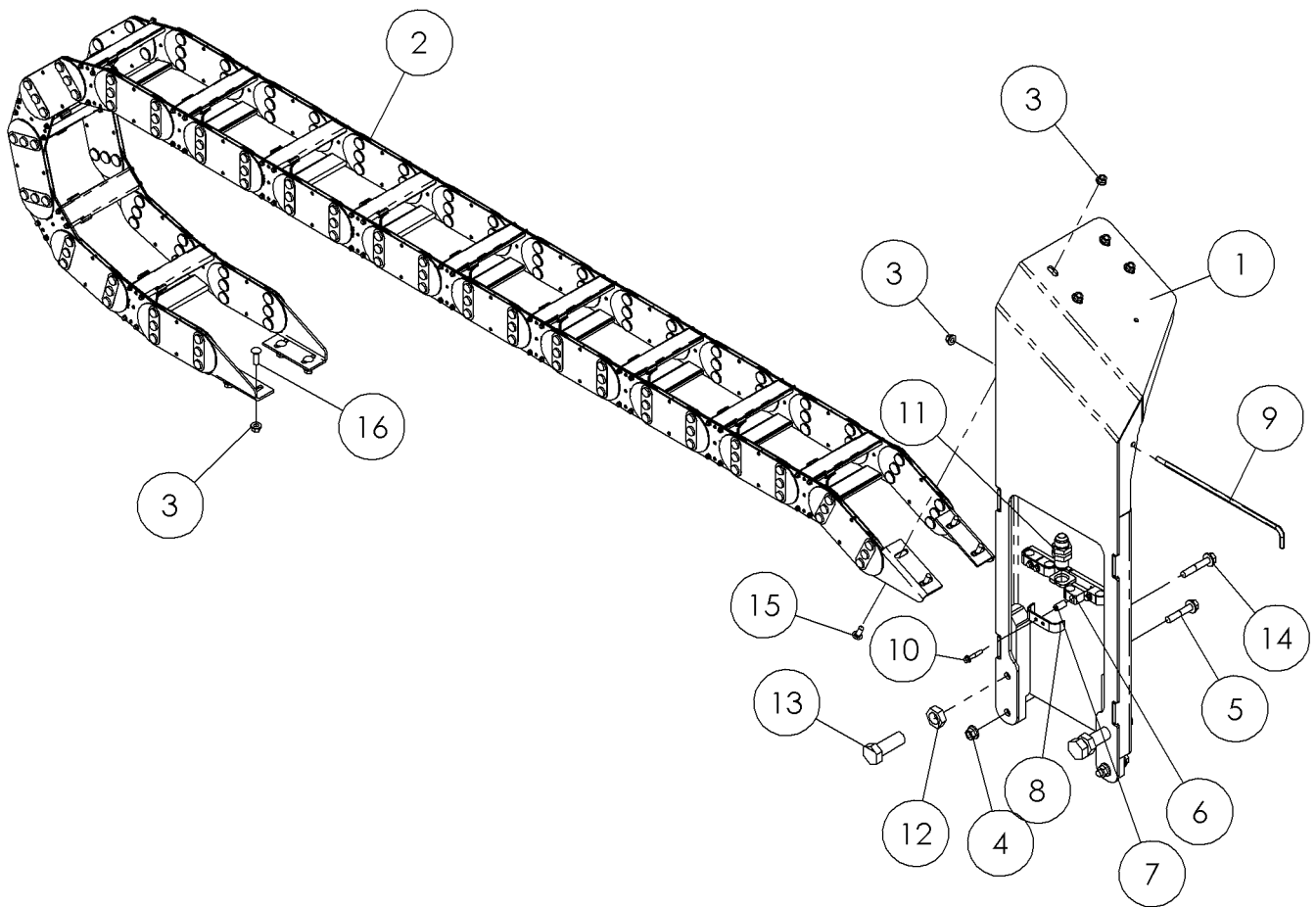


Illustration No. 296281223

## Hose Carrier (S/N 101-192) Fig 6-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296288732	MOUNT - HOSE CARRIER	1	
2		296293770	CARRIER - HOSE	1	Breakdown Fig. 6-5a
3		296300850	NUT-HEXFLGTL-.38-16-G-YZ	9	
4		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
5		296300794	SCREW-HFS-.50-13X2.50-GR8-YZ	2	
6		296296128	CLAMP - TUBE ISOLATOR	4	
7		296296126	BUSHING - TUBE CLAMP	4	
8		296296127	PLATE - CLAMP COVER	2	
9		296296129	ROD - HOSE CARRIER	1	
10		296300756	SCREW-HFS-.25-20X1.50-GR8-YZ	4	
11		201485001	12M JIC X 12M JIC BULKHEAD STR	1	
12		75392001	NUT-1-UNC-GR.8 HEX JAM	2	
13		296296130	SCREW-HSC-1.00-8X2.75X.50-12X1.00GR8-YZ	2	
14		296300795	SCREW-HFS-.50-13X2.75-GR8-YZ	2	
15		375010	BOLT-3/8"-16X1"GD#5 CARRIAGE	4	
16		375012	3/8-16X1 1/4"GD#5CARRIAGE BOLT	4	

Components-Hose Carrier (S/N 193-) Fig 6-5z01r01

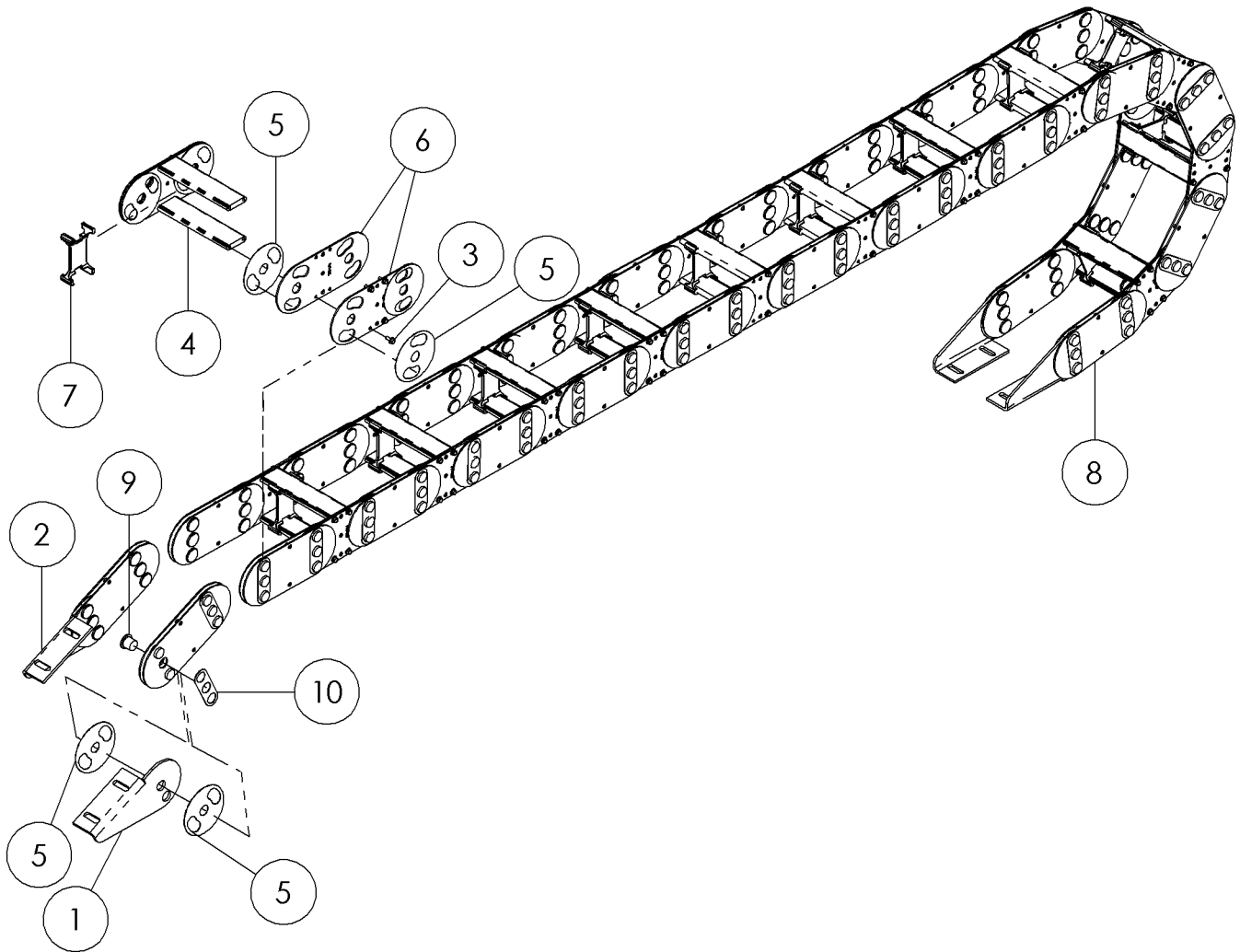
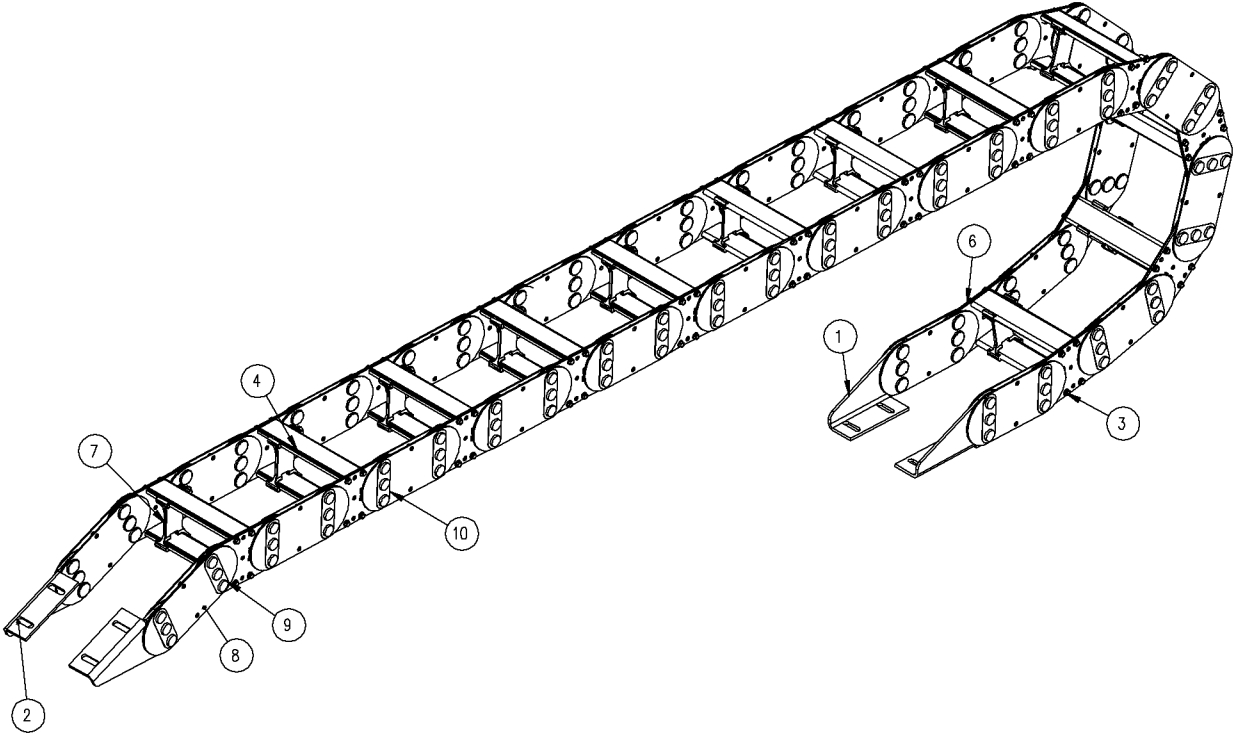


Illustration No. 296306357

## Components-Hose Carrier (S/N 193-) Fig 6-5z01r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration.
1		234256003	PT45E MOUNTING BRACKET ASSY (L	2	
2		234256005	PT45E MOUNTING BRACKET ASSY(R)	2	
3		215252017	SCREW-WHIZ LOCK	62	
4		296306358	SPACER-PT45E HOSE CARRIER 6.50 LG	24	
5		234256011	PT45E ANTI-FRICTION DISC	103	
6		296265591	PT45E INNER LINK 7.5 RADIUS	48	
7		296251020	PT45E AC SEPERATOR	12	
8		234256007	PT45E OUTER LINK W/VERMEERLOGO	52	
9		234256017	PT45E HINGE PIN-PUSH ON FASTNR	156	
10		296251021	PT45E ONE-PIECE PUSH ON	52	

Components-Hose Carrier (S/N 101-192) Fig 6-5z01



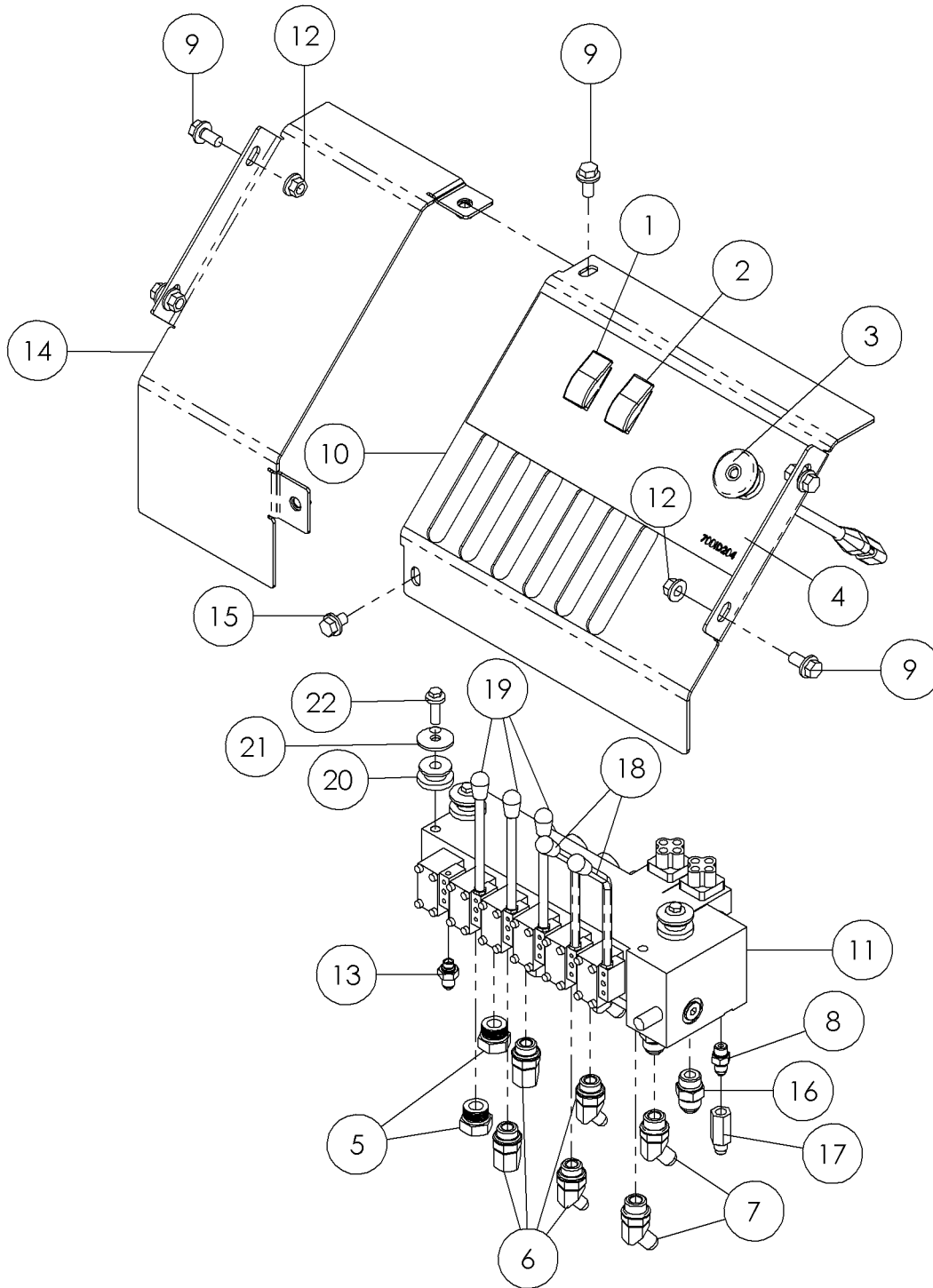


## Components-Hose Carrier (S/N 101-192) Fig 6-5z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		234256003	PT45E MOUNTING BRACKET ASSY (L	2	
2		234256005	PT45E MOUNTING BRACKET ASSY(R)	2	
3		215252017	SCREW-WHIZ LOCK	96	
4		296265592	PT45E ALUMINUM CHANNEL 7.5 LG	24	
5		234256011	PT45E ANTI-FRICTION DISC	100	
6		296265591	PT45E INNER LINK 7.5 RADIUS	48	
7		296251020	PT45E AC SEPERATOR	12	
8		234256007	PT45E OUTER LINK W/VERMEERLOGO	52	
9		234256017	PT45E HINGE PIN-PUSH ON FASTNR	156	
10		296251021	PT45E ONE-PIECE PUSH ON	52	

Rear Transport Valve (S/N 302-) Fig 6-6r07

Illustration No. 296300099

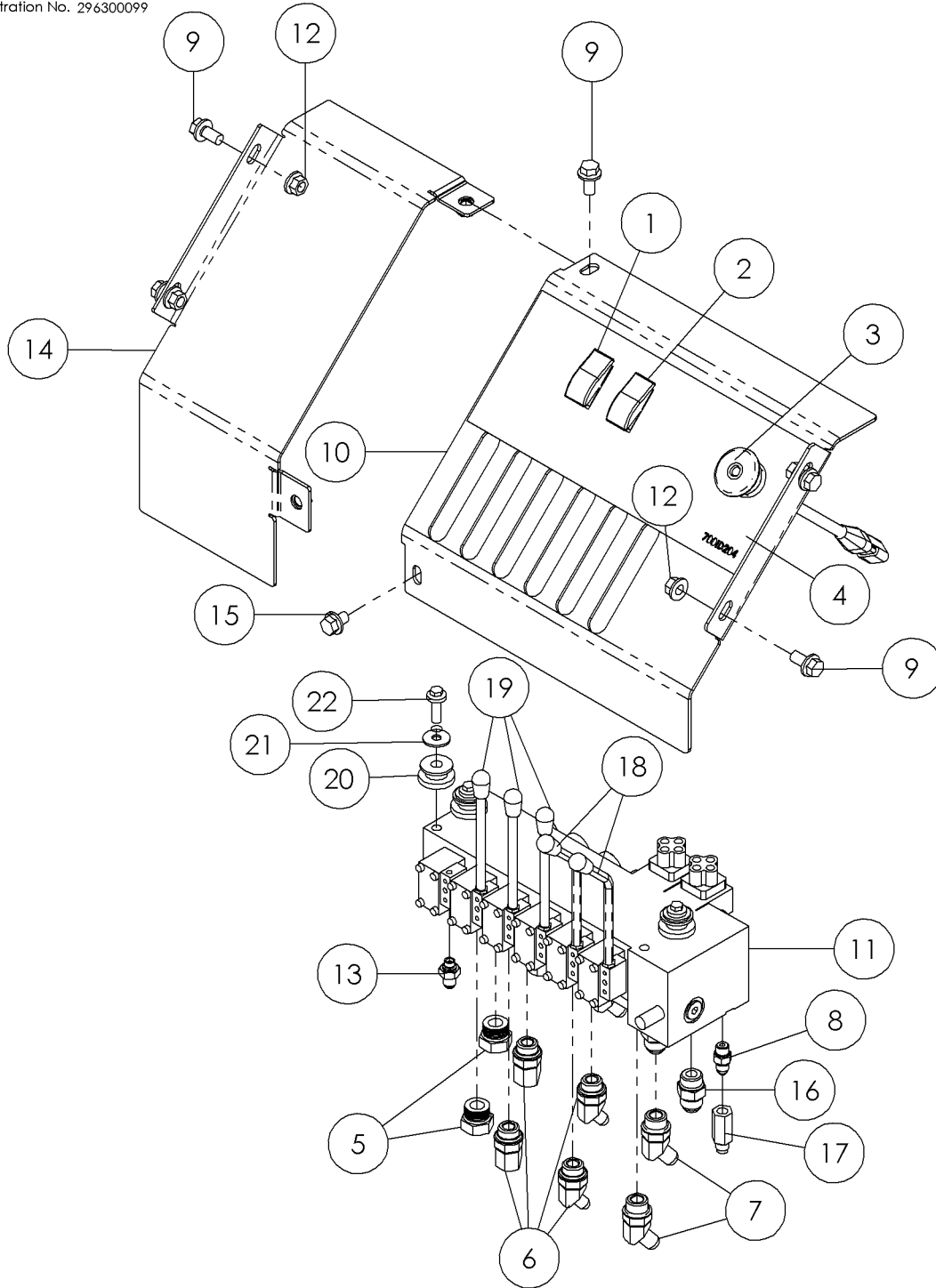


## Rear Transport Valve (S/N 302-) Fig 6-6r07

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700ID204	DECAL - CONTROL REAR	1	Domestic/International
5		56218001	FITTING - PLUG - 8MORB - HEX	2	
6		82932001	FITTING-8MX4M JIC 45DEG ELBOW	6	
7		59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
8		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
9		296300771	SCREW-HFS-..38-16X.75GR8-YZ	5	
10		296294147	PLATE - REAR VALVE COVER	1	
11		296306123	VALVE - 6 BANK PROPORTIONAL	1	Breakdown Fig. 6-6z01
12		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
13		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
14		296306014	WELDMENT - TETHER COVER PLATE	1	
15		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
16		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
17		296257246	VALVE- 4MJICX4FJIC CHECK	1	
18		296306089	HANDLE - REAR VALVE TRACK	2	Breakdown Fig. 6-6z02
19		296306090	HANDLE - REAR VALVE AUXILLIARY	3	Breakdown Fig. 6-6z03
20		255048001	ISOLATOR-RADIATOR	3	
21		287758001	*WASHER - VAC SYSTEM	3	(S/N 302-)
22		507611025	SCREW-HFS,M8-1.25X25,10.9,YZ,D6921,FT	3	

Rear Transport Valve (S/N 291-301) Fig 6-6r06

Illustration No. 296300099



## Rear Transport Valve (S/N 291-301) Fig 6-6r06

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700ID204	DECAL - CONTROL REAR	1	Domestic/International
5		56218001	FITTING - PLUG - 8MORB - HEX	2	
6		82932001	FITTING-8MX4M JIC 45DEG ELBOW	6	
7		59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
8		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
9		296300771	SCREW-HFS-..38-16X.75GR8-YZ	5	
10		296294147	PLATE - REAR VALVE COVER	1	
11		296306123	VALVE - 6 BANK PROPORTIONAL	1	Breakdown Fig. 6-6z01
12		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
13		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
14		296306014	WELDMENT - TETHER COVER PLATE	1	
15		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
16		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
17		296257246	VALVE- 4MJICX4FJIC CHECK	1	
18		296306089	HANDLE - REAR VALVE TRACK	2	Breakdown Fig. 6-6z02
19		296306090	HANDLE - REAR VALVE AUXILLIARY	3	Breakdown Fig. 6-6z03
20		255048001	*ISOLATOR-RADIATOR	3	
21		507086008	*WASHER-FLAT,M8-LARGE RIM,DIN9021	3	
22		507611025	*SCREW-HFS,M8-1.25X25,10.9,YZ,D6921,FT	3	

Rear Transport Valve (S/N 173, 181, 185-290) Fig 6-6r05

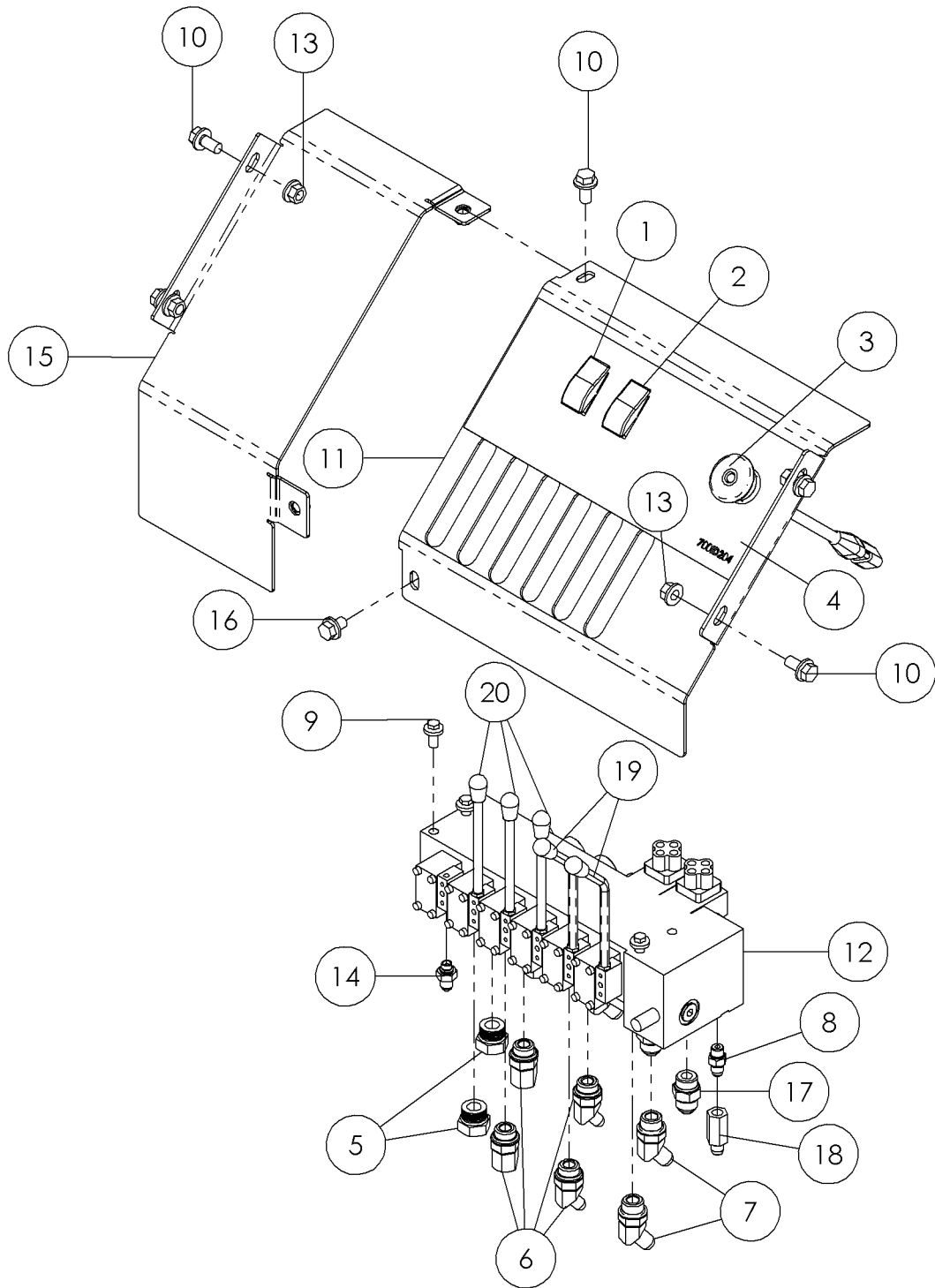


Illustration No. 296300099

## Rear Transport Valve (S/N 173, 181, 185-290) Fig 6-6r05

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Change To Previous Valve.
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700ID204	DECAL - CONTROL REAR	1	
5		56218001	FITTING - PLUG - 8MORB - HEX	2	
6		82932001	FITTING-8MX4M JIC 45DEG ELBOW	6	
7		59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
8		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
9		507611016	SCREW-HFS,M8-1.25X16,10.9,YZ,D6921,FT	3	
10		296300771	SCREW-HFS-..38-16X.75GR8-YZ	5	
11		296294147	PLATE - REAR VALVE COVER	1	
12	*	296306123	VALVE - 6 BANK PROPORTIONAL	1	Breakdown Fig. 6-6a (S/N 173, 181, 185-)
13		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
14		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
15		296306014	WELDMENT - TETHER COVER PLATE	1	
16		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
17		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
18		296257246	VALVE- 4MJICX4FJIC CHECK	1	
19		296306089	HANDLE - REAR VALVE TRACK	2	Breakdown Fig. 6-6b
20		296306090	HANDLE - REAR VALVE AUXILLIARY	3	Breakdown Fig. 6-6c

Rear Transport Valve (S/N 157-172) Fig 6-6r04

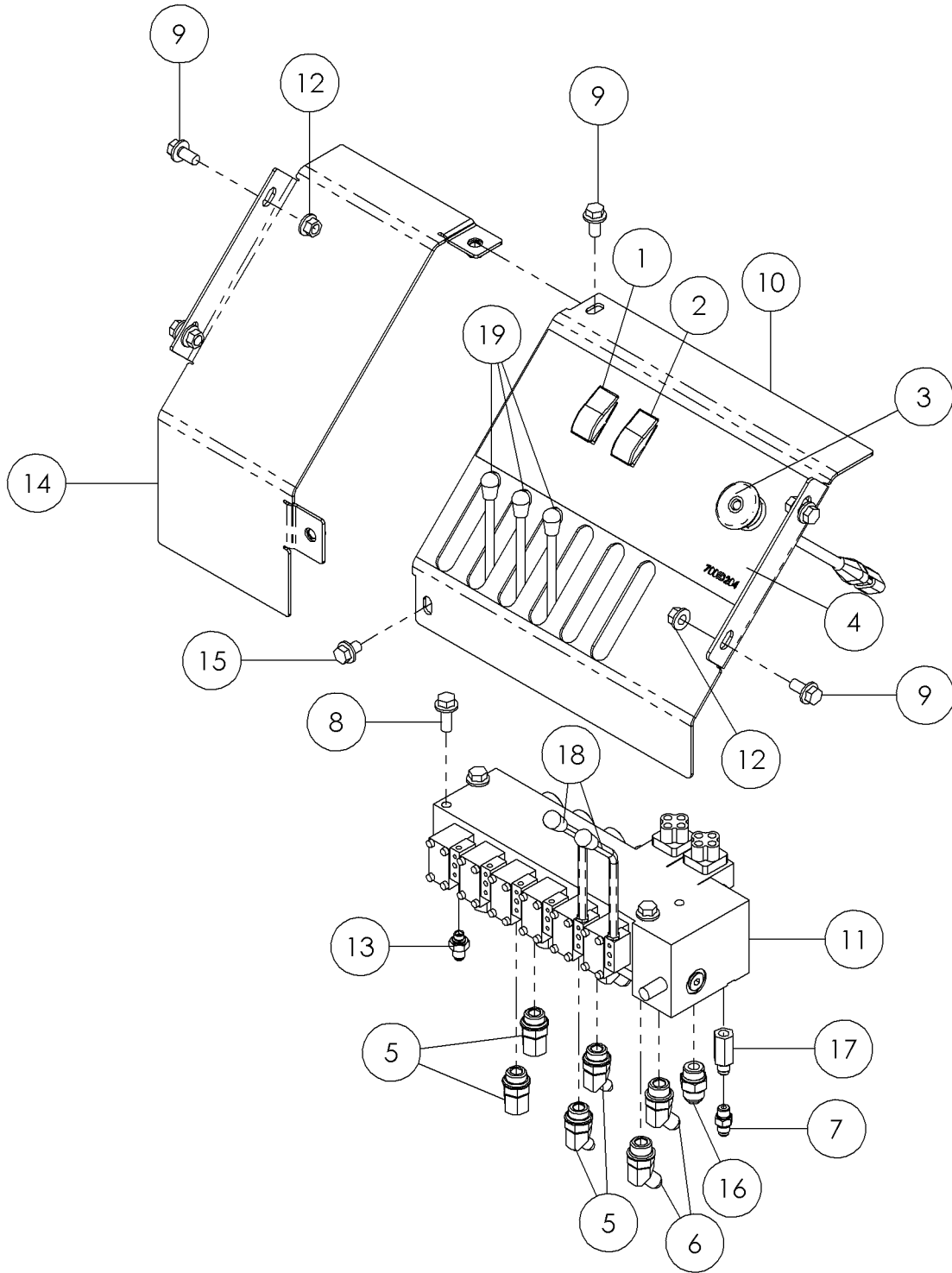


Illustration No. 296306121



## Rear Transport Valve (S/N 157-172) Fig 6-6r04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700ID204	DECAL - CONTROL REAR	1	
5		82932001	FITTING-8MX4M JIC 45DEG ELBOW	8	
6		59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
7		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
8		296300772	SCREW-HFS-.38-16X1.00-GR8-YZ	3	
9		296300771	SCREW-HFS-.38-16X.75GR8-YZ	5	
10		296294147	PLATE - REAR VALVE COVER	1	
11	*	296306100	VALVE-6 BANK PROPORTIONAL	1	Breakdown Fig. 6-6a (SN 157- )
12		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
13		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
14		296306014	WELDMENT - TETHER COVER PLATE	1	
15		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
16		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
17		296257246	VALVE- 4MJICX4FJIC CHECK	1	
18		296306089	HANDLE - REAR VALVE TRACK	2	Breakdown Fig. 6-6b
19	*	296306090	HANDLE - REAR VALVE AUXILLIARY	3	Breakdown Fig. 6-6c

Rear Transport Valve (S/N 137-156) Fig 6-6r03

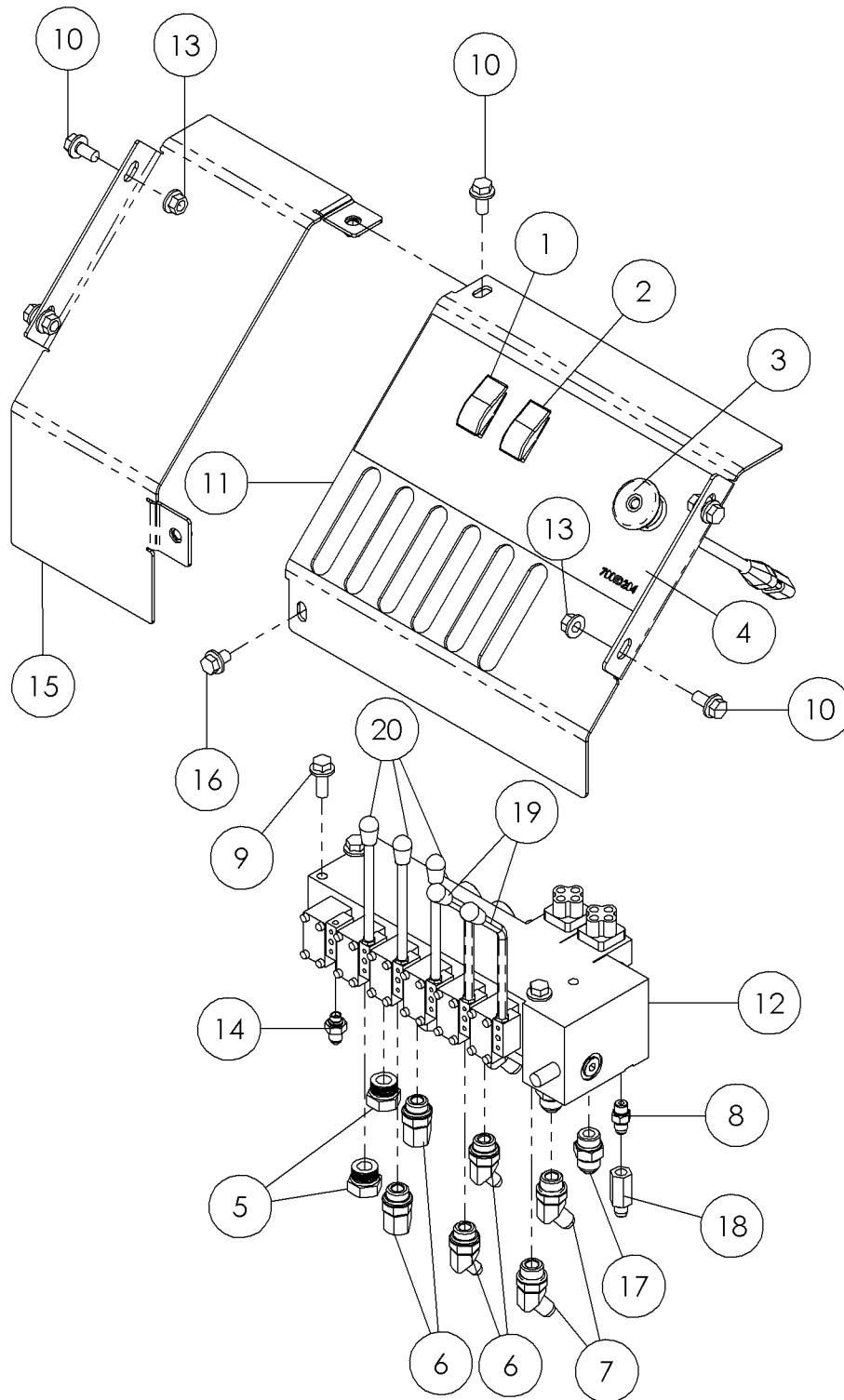


Illustration No. 296300099

## Rear Transport Valve (S/N 137-156) Fig 6-6r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700ID204	DECAL - CONTROL REAR	1	Domestic/International
5		56218001	FITTING - PLUG - 8MORB - HEX	2	
6		82932001	FITTING-8MX4M JIC 45DEG ELBOW	6	
7		59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
8		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
9		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	3	
10		296300771	SCREW-HFS-..38-16X.75GR8-YZ	5	
11		296294147	PLATE - REAR VALVE COVER	1	
12	*	296306123	VALVE - 6 BANK PROPORTIONAL	1	(SN 137- ) Breakdown Fig. 6-6a
13		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
14		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
15		296306014	WELDMENT - TETHER COVER PLATE	1	
16		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
17		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
18		296257246	VALVE- 4MJICX4FJIC CHECK	1	
19		296306089	HANDLE - REAR VALVE TRACK	2	Breakdown Fig. 6-6b
20	*	296306090	HANDLE - REAR VALVE AUXILLIARY	3	Breakdown Fig. 6-6c

Rear Transport Valve (S/N 101-136) Fig 6-6r02

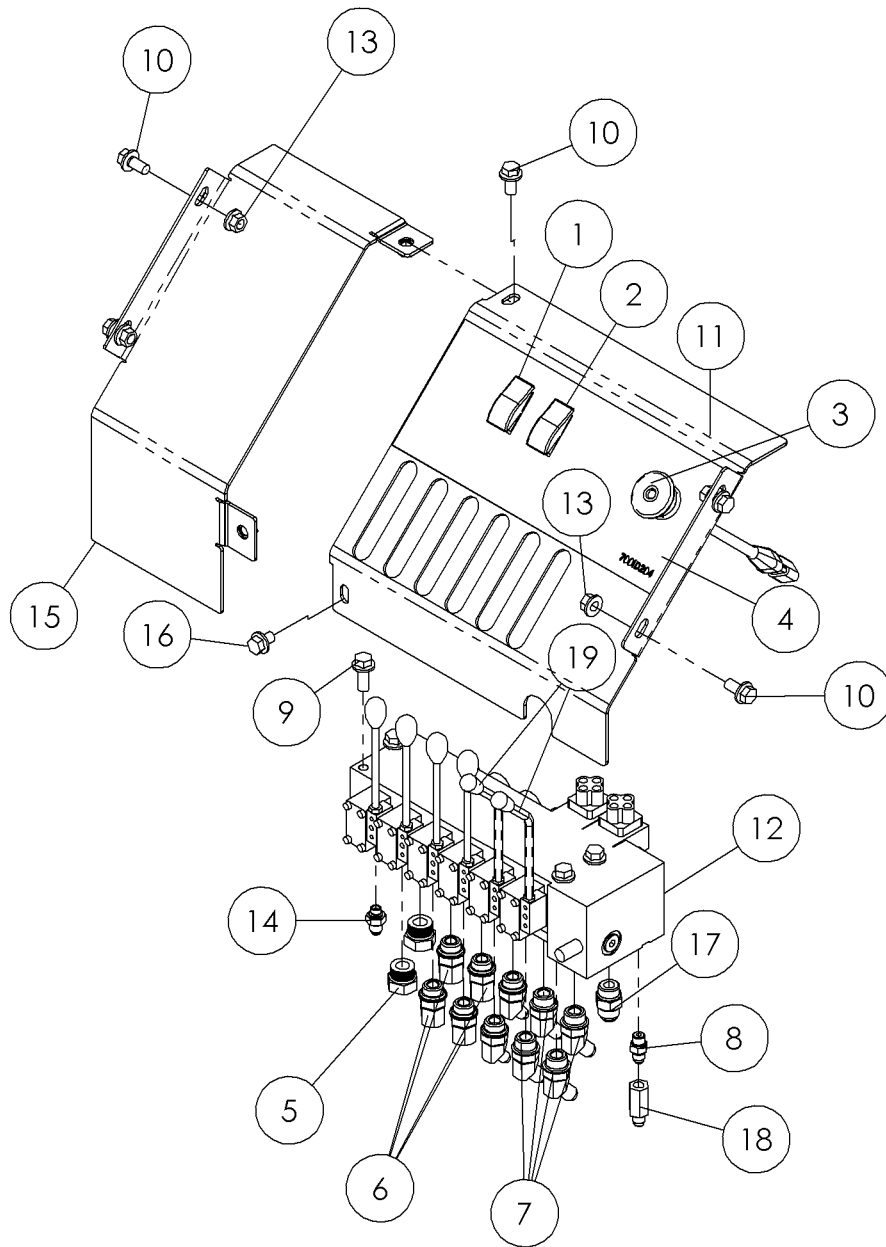


Illustration No. 296300099

## Rear Transport Valve (S/N 101-136) Fig 6-6r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700ID204	DECAL - CONTROL REAR	1	Domestic/International
5		56218001	FITTING - PLUG - 8MORB - HEX	2	
6		82932001	FITTING-8MX4M JIC 45DEG ELBOW	6	
7		59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
8		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
9		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	4	
10		296300771	SCREW-HFS-..38-16X.75GR8-YZ	5	
11		296294147	PLATE - REAR VALVE COVER	1	
12		296294149	VALVE - 6 BANK PROPORTIONAL	1	Breakdown Fig. 6-6a
13		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
14		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
15		296306014	WELDMENT - TETHER COVER PLATE	1	
16		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
17		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
18		296257246	VALVE- 4MJICX4FJIC CHECK	1	
19	*	296306089	HANDLE - REAR VALVE TRACK	2	Breakdown Fig. 6-6b

Rear Transport Valve Fig 6-6r01

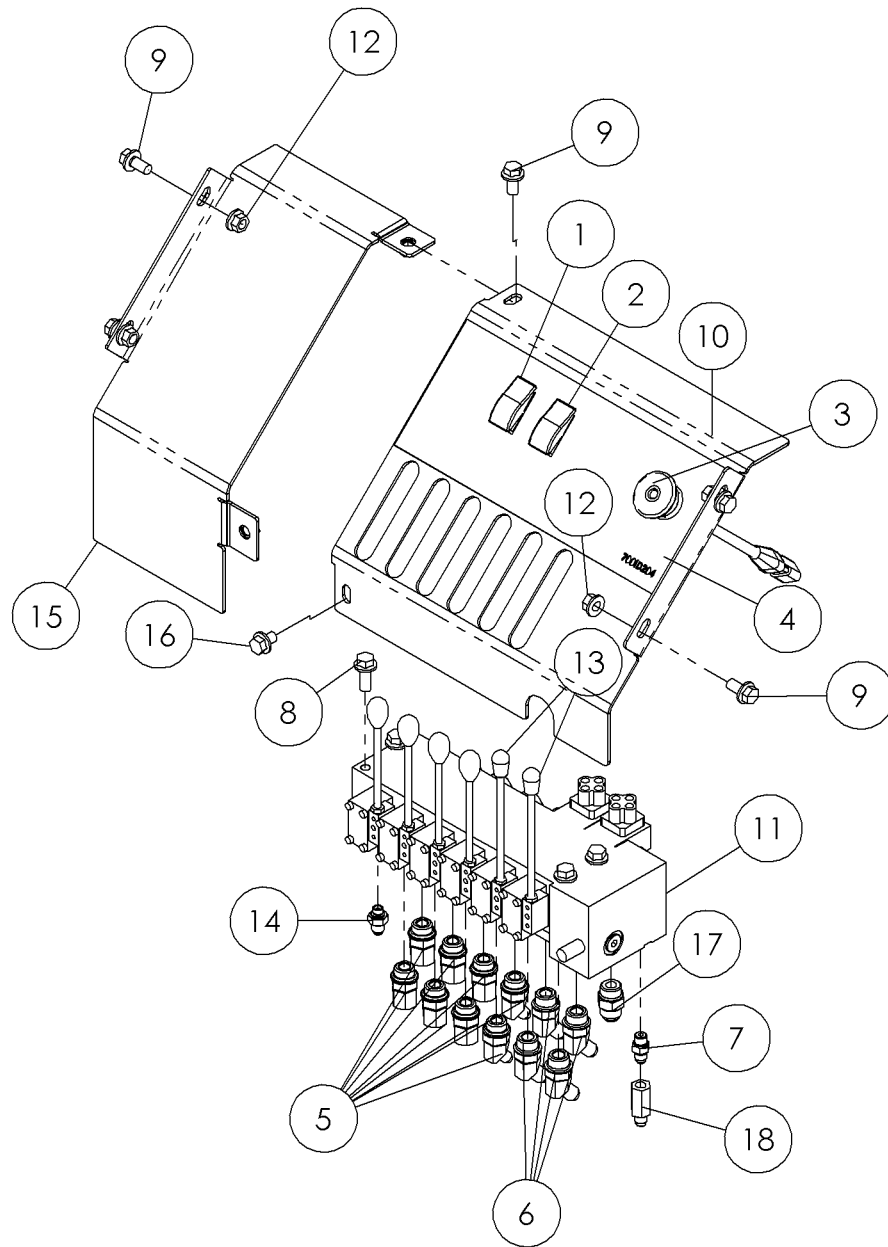


Illustration No. 296284494

## Rear Transport Valve Fig 6-6r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration & Parts List.
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700id204	DECAL - CONTROL REAR	1	Domestic/International
5		82932001	FITTING-8MX4M JIC 45DEG ELBOW	8	
6	*	59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
7		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
8		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	4	
9		296300771	SCREW-HFS-..38-16X.75GR8-YZ	5	
10		296294147	PLATE - REAR VALVE COVER	1	
11		296294149	VALVE - 6 BANK PROPORTIONAL	1	Breakdown Fig. 6-6a
12	*	296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
13		296306015	HANDLE - REAR VALVE LONG	2	
14		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
15		296306014	WELDMENT - TETHER COVER PLATE	1	
16		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
17		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
18		296257246	VALVE- 4MJICX4FJIC CHECK	1	

Rear Transport Valve Fig 6-6

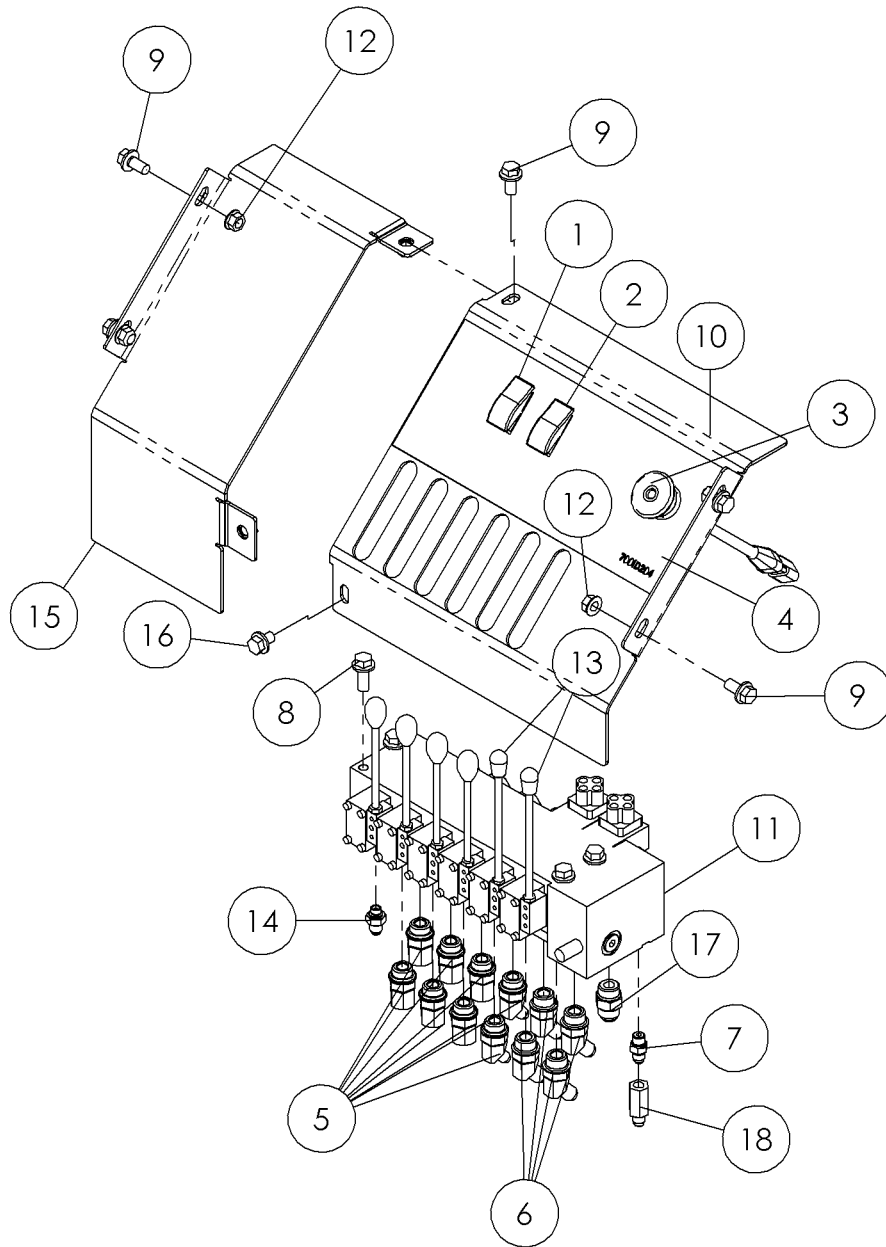


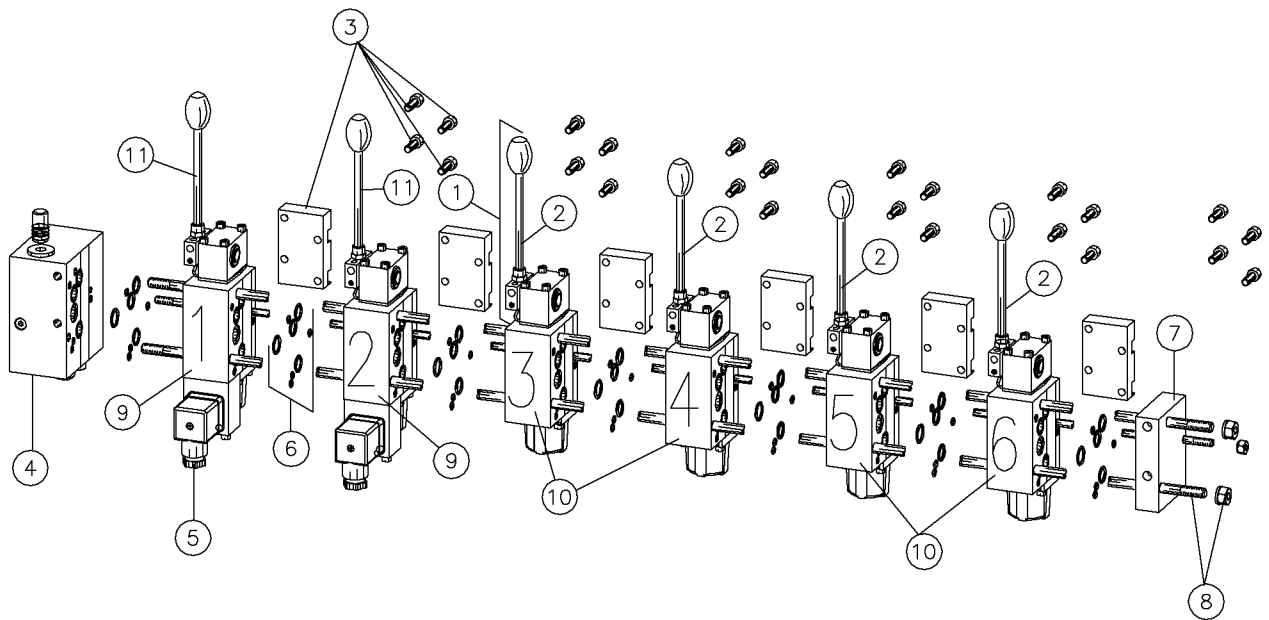
Illustration No. 296284494



## Rear Transport Valve Fig 6-6

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	1	
2		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	1	
3		163628359	E-STOP - HEAVY DUTY	1	
4		700id204	DECAL - CONTROL REAR	1	Domestic/International
5		82932001	FITTING-8MX4M JIC 45DEG ELBOW	8	
6		59425001	FITTING-6M JICX8M ADJ.45 ELBOW	4	
7		60908001	FITTING-4MX4M JIC STR ADAPTER	1	
8		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	4	
9		296300771	SCREW-HFS-..38-16X.75GR8-YZ	5	
10		296294147	PLATE - REAR VALVE COVER	1	
11		296294149	VALVE - 6 BANK PROPORTIONAL	1	Breakdown Fig. 6-6a
12		296300895	NUT-HEXFLG-.38-16-GR8-YZ	4	
13		296306015	HANDLE - REAR VALVE LONG	2	
14		296294236	FITTING - STR P 1/8BSPP X #4MJIC	1	
15		296306014	WELDMENT - TETHER COVER PLATE	1	
16		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
17		53824001	FITTING-#8M O-RING-#8M JIC ST.	2	
18		296257246	VALVE- 4MJICX4FJIC CHECK	1	

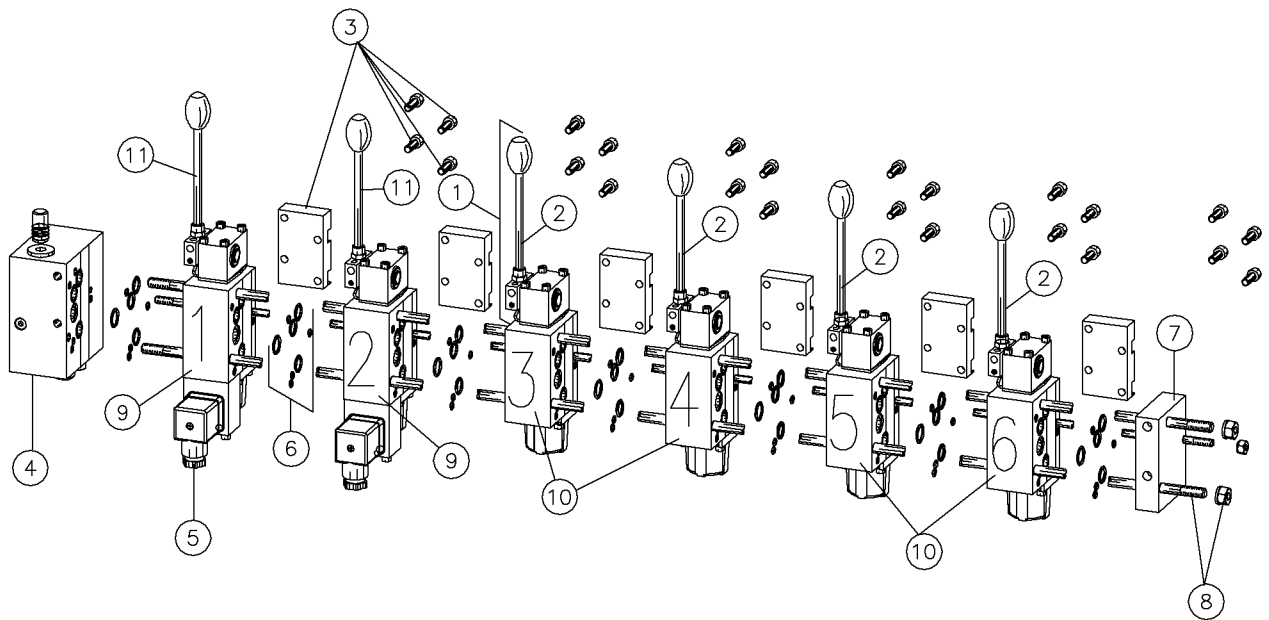
Components-Rear Transport Valve (S/N 173, 181, 185-) Fig 6-6z01r02



## Components-Rear Transport Valve (S/N 173, 181, 185-) Fig 6-6z01r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Change To Previous Valve.
1		296302309	HAND LEVER ASSY	4	(Inc. Ref. 2)
2		296306090	HANDLE	4	
3		296302311	ANCILLARY BLOCK W/BOLTS	6	(Inc. Bolts)
4		296302312	INLET BLOCK ASSY	1	
5		296302313	SOLENOID W/DIN CONNECTOR	2	
6		296302314	SECTIONAL SEAL KIT	6	
7		296302315	END PLATE (E4)	1	
8		296302316	TIE ROD KIT	1	Inc. Nuts And Washers.
9		296302317	WORK SECTION	2	Inc. Ref. 1, 2, 3, And 5
10		296302318	WORK SECTION	4	Inc. Ref. 1, 2, And 3
11		296306015	HANDLE - REAR VALVE LONG	2	
	*	296306123	VALVE - 6 BANK PROPORTIONAL	1	Inc. All Items In Figure. (S/N 173, 181, 185-)

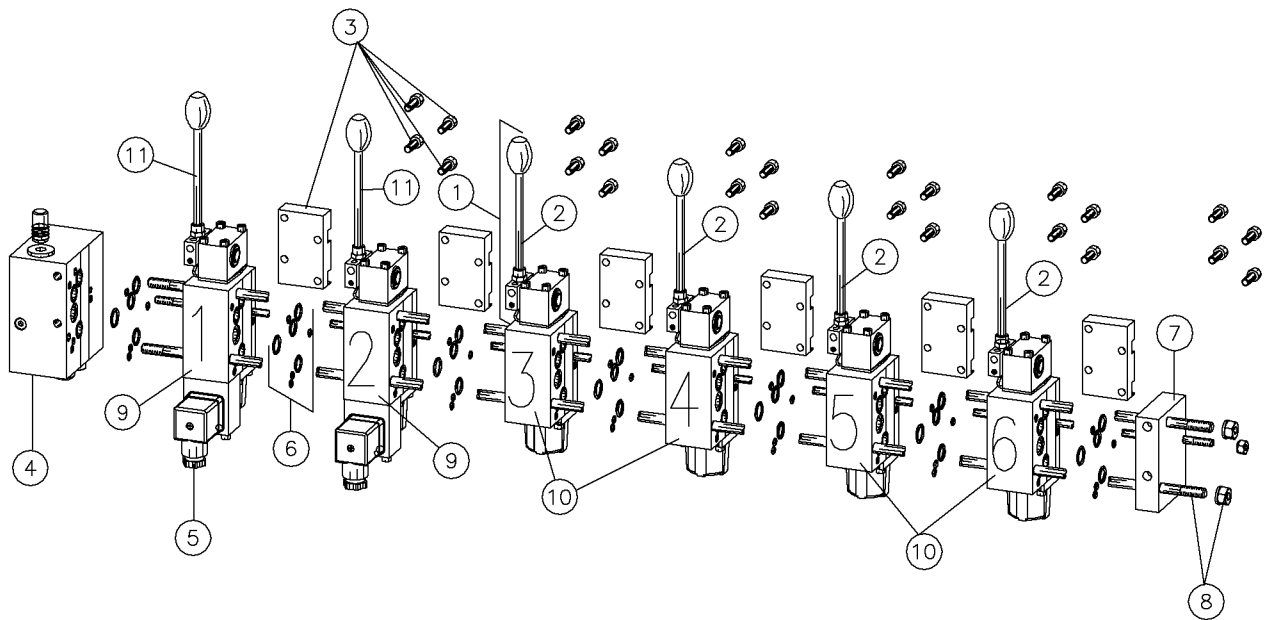
Components-Rear Transport Valve (S/N 157- 172) Fig 6-6z01r01



## Components-Rear Transport Valve (S/N 157- 172) Fig 6-6z01r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Parts List.
1		296302309	HAND LEVER ASSY	4	Inc. Ref. 2
2	*	296306090	HANDLE	4	
3		296302311	ANCILLARY BLOCK W/BOLTS	6	Inc. Bolts
4		296302312	INLET BLOCK ASSY	1	
5		296302313	SOLENOID W/DIN CONNECTOR	2	
6		296302314	SECTIONAL SEAL KIT	6	
7		296302315	END PLATE (E4)	1	
8		296302316	TIE ROD KIT	1	Inc. Nuts And Washers.
9		296302317	WORK SECTION	2	Inc. Ref. 1, 2, 3, And 5
10		296302318	WORK SECTION	4	Inc. Ref. 1, 2, And 3
11		296306015	HANDLE - REAR VALVE LONG	2	
	*	296306123	VALVE - 6 BANK PROPORTIONAL	1	(SN 137-) Inc. All Items In Figure.

Components-Rear Transport Valve (S/N 101-156) Fig 6-6z01



## Components-Rear Transport Valve (S/N 101-156) Fig 6-6z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302309	HAND LEVER ASSY	4	Inc. Ref. 2
2		296302310	HANDLE	4	
3		296302311	ANCILLARY BLOCK W/BOLTS	6	Inc. Bolts
4		296302312	INLET BLOCK ASSY	1	
5		296302313	SOLENOID W/DIN CONNECTOR	2	
6		296302314	SECTIONAL SEAL KIT	6	
7		296302315	END PLATE (E4)	1	
8		296302316	TIE ROD KIT	1	Inc. Nuts And Washers.
9		296302317	WORK SECTION	2	Inc. Ref. 1, 2, 3, And 5
10		296302318	WORK SECTION	4	Inc. Ref. 1, 2, And 3
11		296306015	HANDLE - REAR VALVE LONG	2	
		296294149	VALVE - 6 BANK PROPORTIONAL	1	Inc. All Items In Figure.

Components-Control Handle (S/N 101-156) Fig 6-6z02

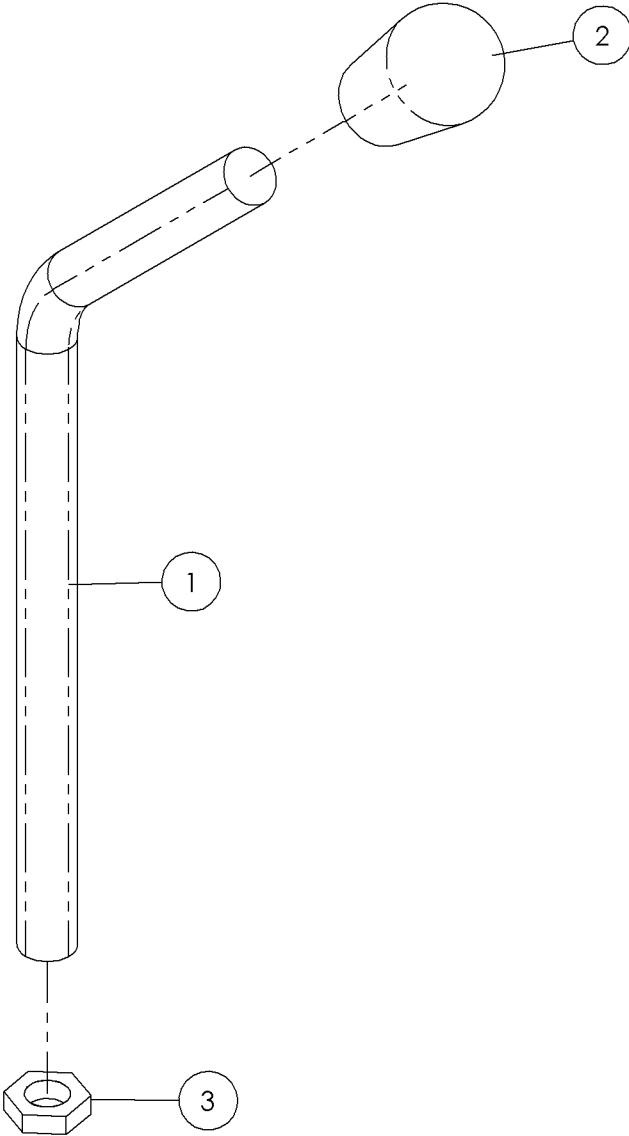


Illustration No. 296306089



## Components-Control Handle (S/N 101-156) Fig 6-6z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Addition To Manual
1		296306088	ROD - BENT HANDLE	1	
2		296294234	KNOB - M6 SHAFT HANDLE	1	
3		14569001	NUT-HEX M6-1.00 CL8 YZ D934	1	
		296306089	HANDLE - REAR VALVE TRACK		Inc. All Items In Figure.

Components-Control Handle Fig 6-6z03

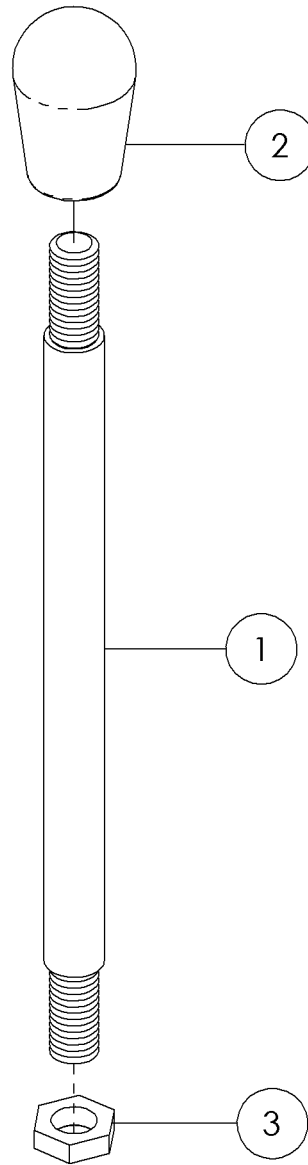


Illustration No. 296306090

Components-Control Handle Fig 6-6z03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Correct Parts List.
1		296306084	ROD - THREADED HANDLE	1	
2		296294234	KNOB - M6 SHAFT HANDLE	1	
3		14569001	NUT-HEX M6-1.00 CL8 YZ D934	1	
	*	296306090	HANDLE - REAR VALVE AUXILLIARY		(Inc. All Items In Figure.)

Intake Manifold (S/N 127-) Fig 6-7r01

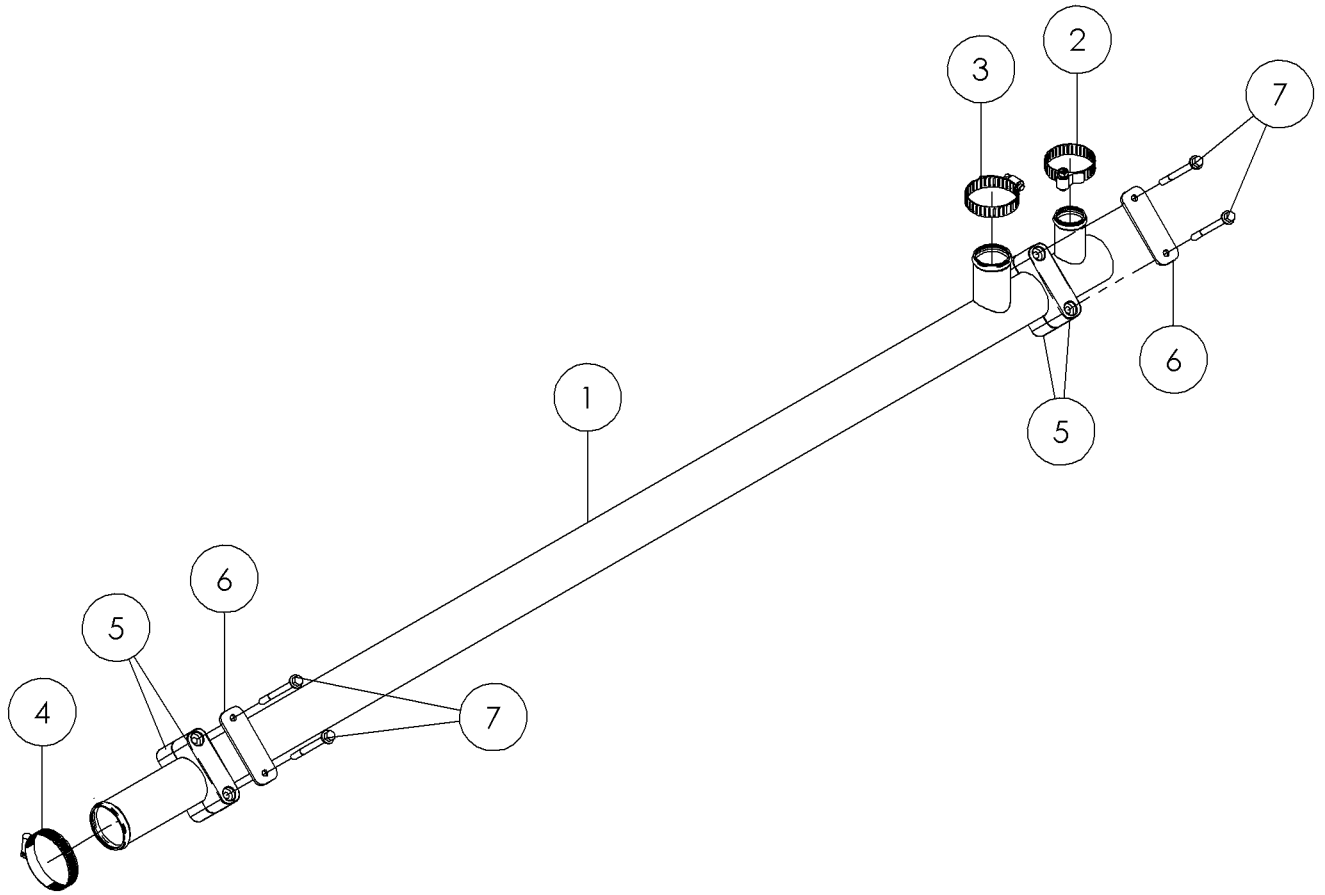


Illustration No. 296288725

Intake Manifold (S/N 127-) Fig 6-7r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		New Tube
1	*	296306310	TUBE-HYDRAULIC SUCTION	1	(SN 127- )
2	*	1580009	HOSE CLAMP - 1 3/4"	1	(SN 127- )
3		1580011	HOSE CLAMP - 2"	1	
4		1580013	HOSE CLAMP - 2 1/2"	1	
5		296282122	CLAMP-1.76 PAIR	2	
6		278066005	PLATE - COVER	2	
7		296300925	SCREW-HFS-.25-20X2.75-GR8-YZ	4	

Intake Manifold (S/N 101-126) Fig 6-7

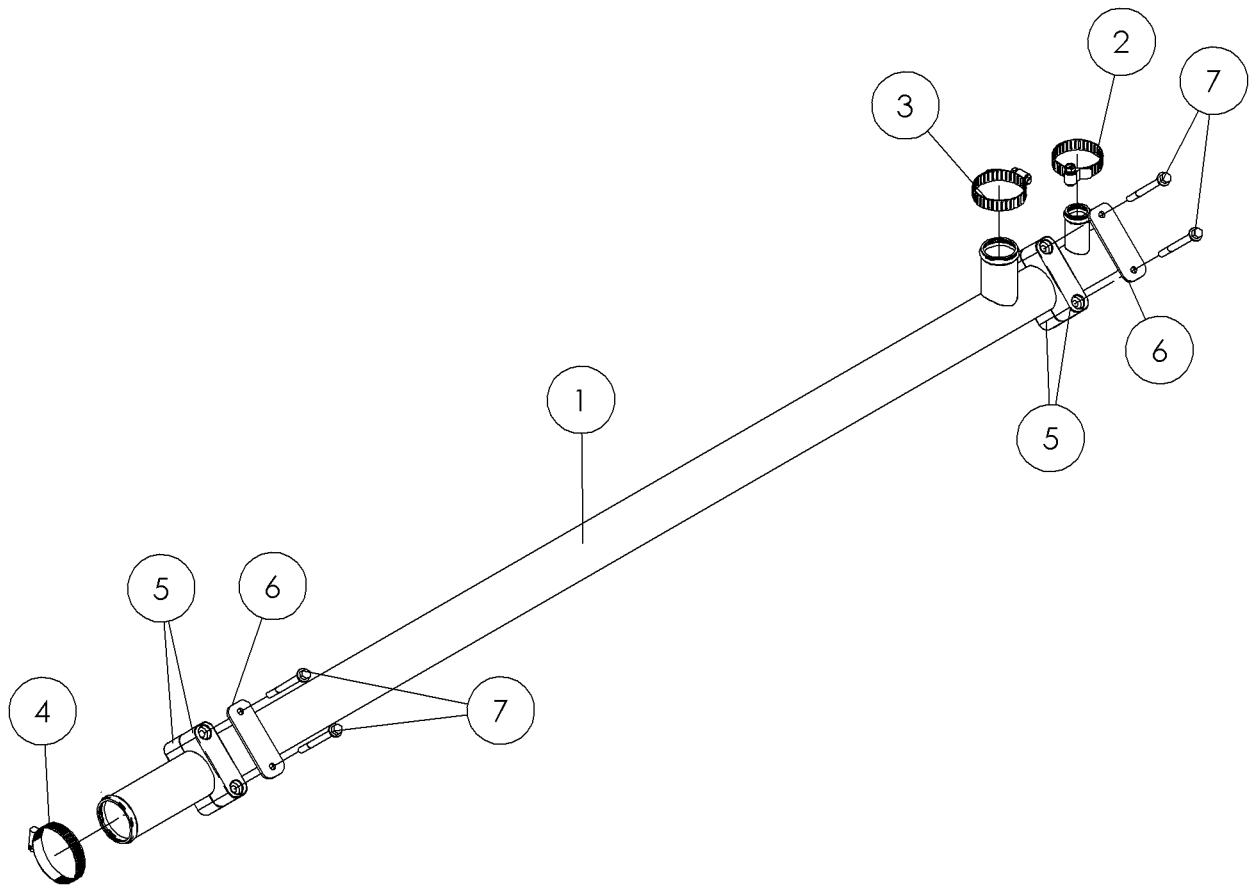


Illustration No. 296288725

## Intake Manifold (S/N 101-126) Fig 6-7

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296296099	TUBE-HYDRAULIC SUCTION	1	
2		1580007	HOSE CLAMP - 1 1/2"	1	
3		1580011	HOSE CLAMP - 2"	1	
4		1580013	HOSE CLAMP - 2 1/2"	1	
5		296282122	CLAMP-1.76 PAIR	2	
6		278066005	PLATE - COVER	2	
7		296300925	SCREW-HFS-.25-20X2.75-GR8-YZ	4	

Control Panel (S/N 152-) Fig 7-1r02

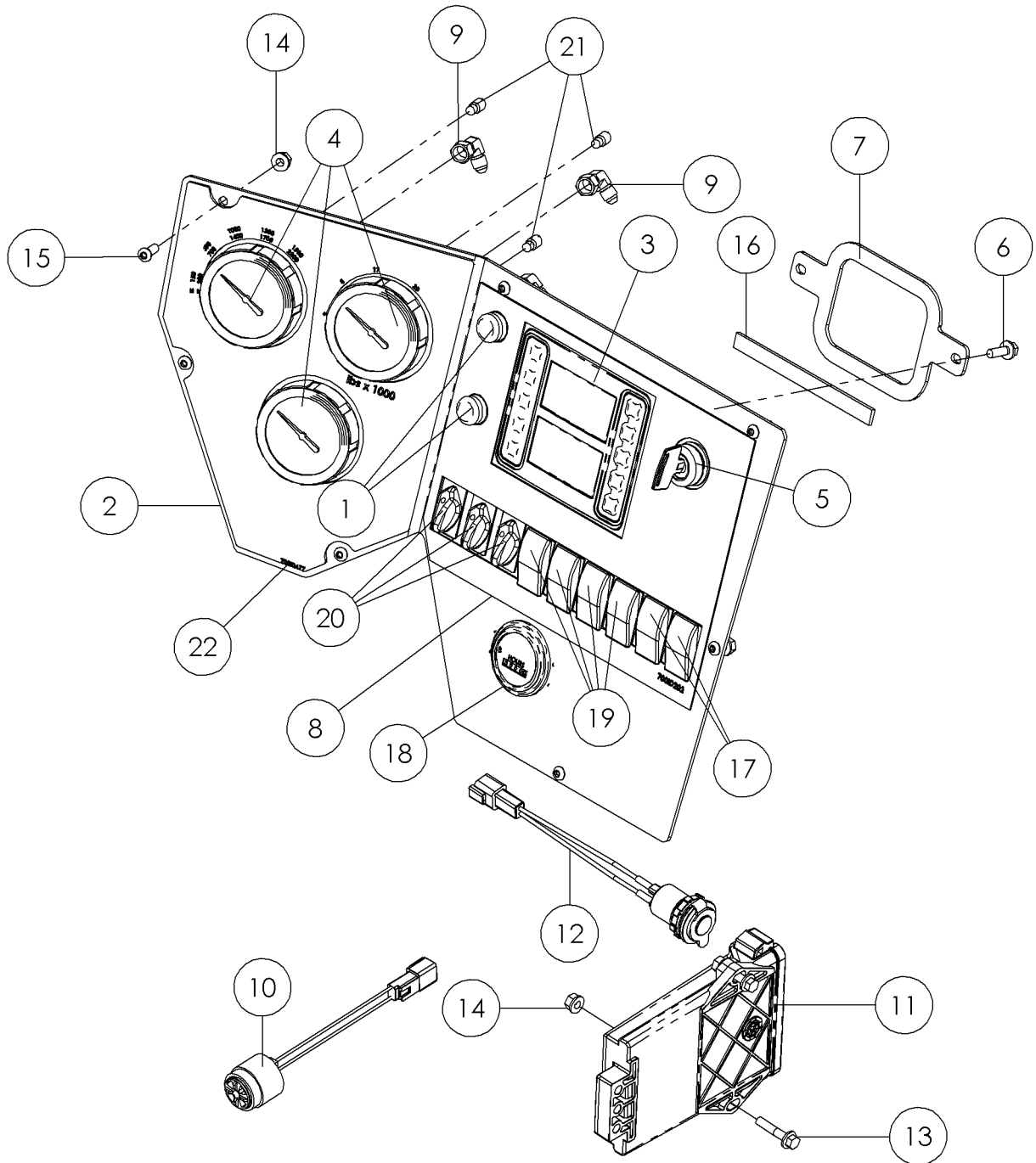


Illustration No. 296283428



## Control Panel (S/N 152-) Fig 7-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		260766001	SWITCH-MOM BUTTON NO	2	
2	*	296294067	MOUNT-GAUGE AND SWITCH	1	(SN 152-)
3		296287457	ASM - DP10 D20X22II	1	
4		289709001	GAUGE - SPAN 5000 PSI WITH BACKLITE	3	
5		296271130	KEY - SWITCH	1	
6		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
7		296283495	PLATE - LED HOLDDOWN	1	
8		700ID202	DECAL - CONTROL DASH PANEL - D20X22II	1	
9		53658001	FITTING-4M JICX4 FS JIC 90 DEG	3	
10		296292078	HORN - ZAP ALERT DEUTSCH 2 PIN	1	
11		296270163	ASM, STRIKEALERT BLANK	1	
12		154677001	OUTLET - 12 VOLT	1	
13		296300755	SCREW-HFS-.25-20X1.25-GRI-YZ	2	
14		296300848	NUT-HEXFLGTL-.25-20-G-YZ	9	
15		278986001	SCREW - 1/4 - 20 X 3/4 GR8 SBHCS CZ	7	
16		282764001	WEATHER STRIP	1	
17		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	2	
18		180006564	GAUGE-HOUR METER MAXIMA	1	
19		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	4	
20		296306253	SWITCH - DP ROTARY (ON)-OFF-(ON)	3	
21		70889001	BULB. #112-1418	3	
22	*	700ID677	DECAL - D20X22 II GAUGE CLUSTER	1	

Control Panel (S/N 101-151) Fig 7-1r01

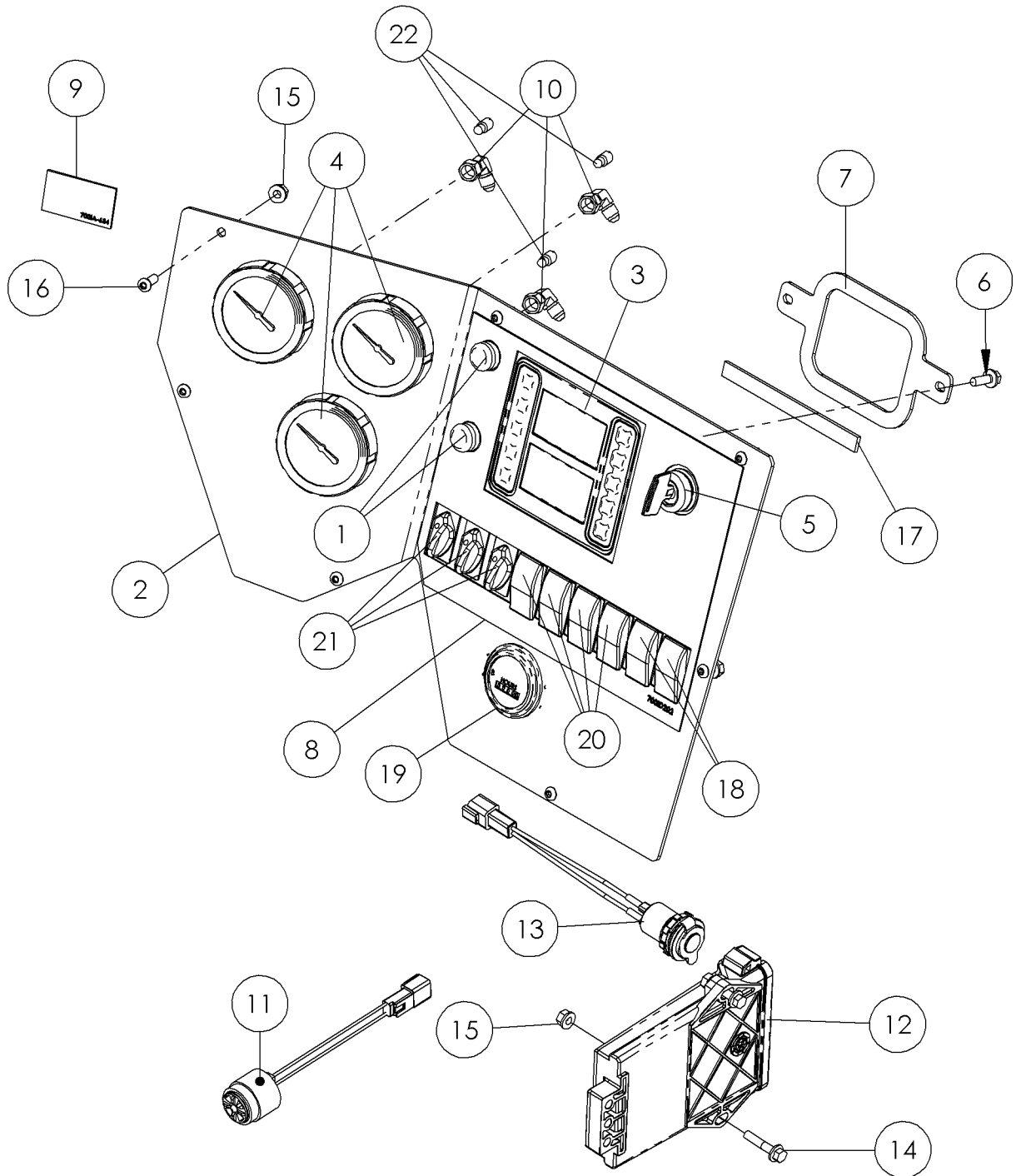


Illustration No. 296283428

## Control Panel (S/N 101-151) Fig 7-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Add Bulbs.
1		260766001	SWITCH-MOM BUTTON NO	2	
2		296294067	MOUNT-GAUGE AND SWITCH	1	
3		296287457	ASM - DP10 D20X22II	1	
4		289709001	GAUGE - SPAN 5000 PSI WITH BACKLITE	3	
5		296271130	KEY - SWITCH	1	
6		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
7		296283495	PLATE - LED HOLDDOWN	1	
8		700id202	DECAL - CONTROL DASH PANEL - D20X22II	1	Domestic/International
9		700ia634	DECAL-GAUGES	1	Domestic/International
10		53658001	FITTING-4M JICX4 FS JIC 90 DEG	3	
11		296292078	HORN - ZAP ALERT DEUTSCH 2 PIN	1	
12		296270163	ASM, STRIKEALERT BLANK	1	
13		154677001	OUTLET - 12 VOLT	1	
14		296300755	SCREW-HFS-.25-20X1.25-GRI-YZ	2	
15		296300848	NUT-HEXFLGTL-.25-20-G-YZ	9	
16		278986001	SCREW - 1/4 - 20 X 3/4 GR8 SBHCS CZ	7	
17		282764001	WEATHER STRIP	1	
18		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	2	
19		180006564	GAUGE-HOUR METER MAXIMA	1	
20		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	4	
21		296306253	SWITCH - DP ROTARY (ON)-OFF-(ON)	3	
22	*	70889001	BULB. #112-1418	3	

Control Panel Fig 7-1

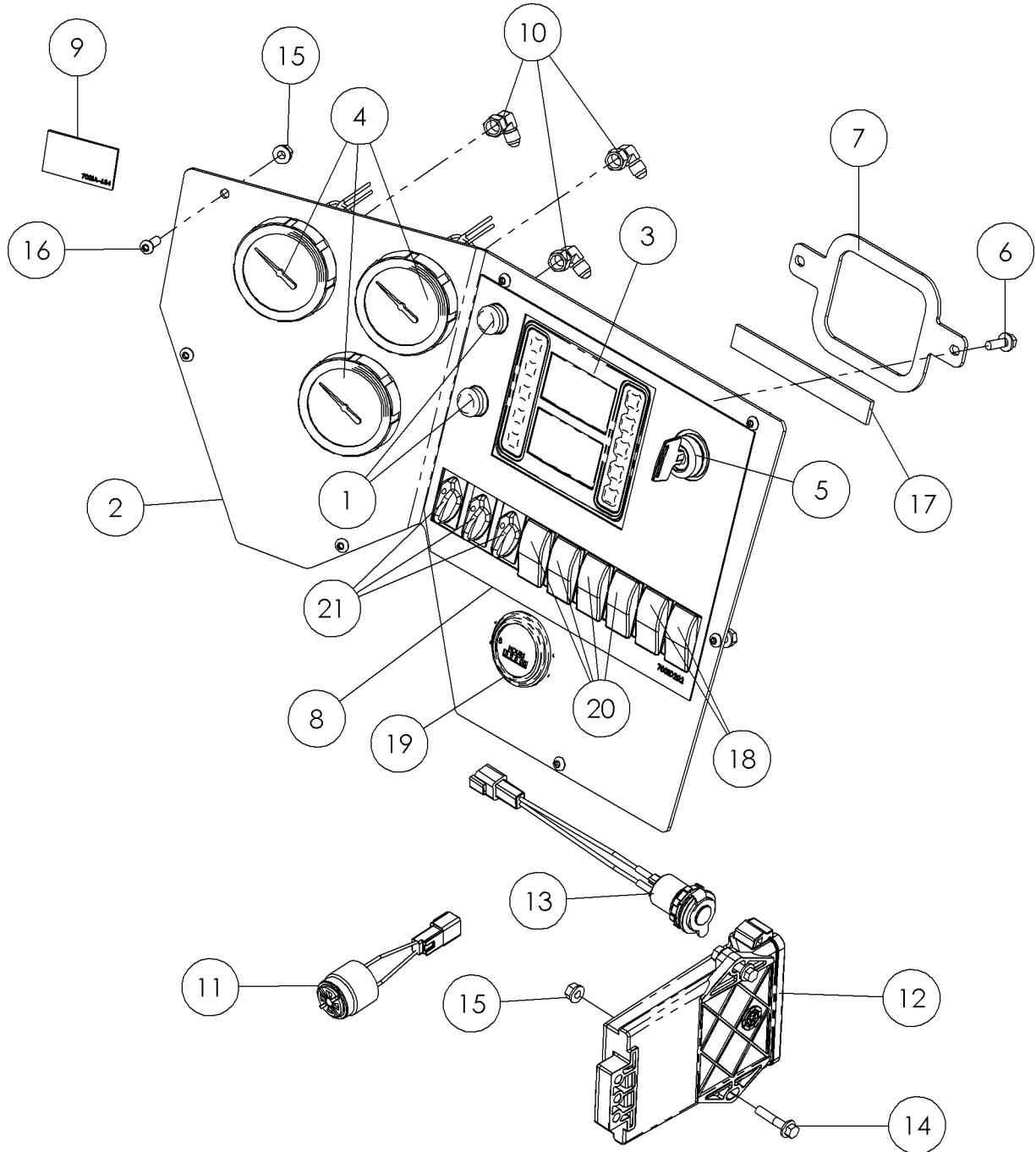


Illustration No. 296283428

Control Panel Fig 7-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		260766001	SWITCH-MOM BUTTON NO	2	
2		296294067	MOUNT-GAUGE AND SWITCH	1	
3		296287254	ASM - DP10	1	
4		289709001	GAUGE - SPAN 5000 PSI WITH BACKLITE	3	
5		296271130	KEY - SWITCH	1	
6		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
7		296283495	PLATE - LED HOLDDOWN	1	
8		700id202	DECAL - CONTROL DASH PANEL - D20X22II	1	Domestic/International
9		700ia634	DECAL-GAUGES	1	Domestic/International
10		53658001	FITTING-4M JICX4 FS JIC 90 DEG	3	
11		296292078	HORN - ZAP ALERT DEUTSCH 2 PIN	1	
12		296270163	ASM, STRIKEALERT BLANK	1	
13		154677001	OUTLET - 12 VOLT	1	
14		296300755	SCREW-HFS-.25-20X1.25-GRI-YZ	2	
15		296300848	NUT-HEXFLGTL-.25-20-G-YZ	9	
16		278986001	SCREW - 1/4 - 20 X 3/4 GR8 SBHCS CZ	7	
17		282764001	WEATHER STRIP	1	
18		296306251	SWITCH - DP 3 POSITION MOM (ON), OFF, (ON)	2	
19		180006564	GAUGE-HOUR METER MAXIMA	1	
20		296306252	SWITCH - SP 2 POSITION ON, NONE, OFF	4	
21		296306253	SWITCH - DP ROTARY (ON)-OFF-(ON)	3	

Rack Switch Fig 7-2r01

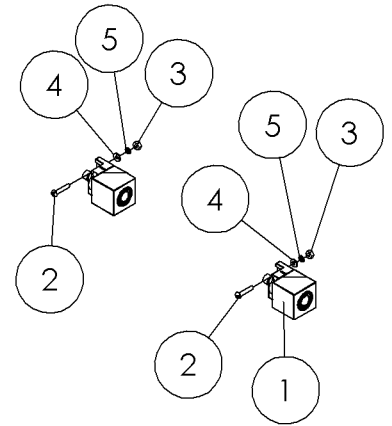
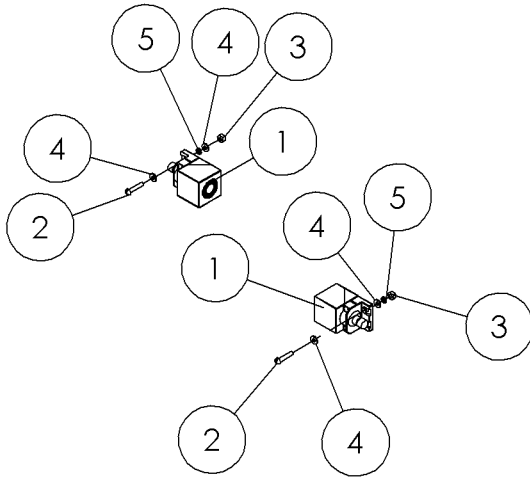
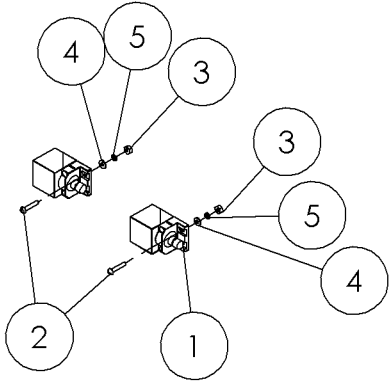


Illustration No. 296291781

## Rack Switch Fig 7-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Change Hardware
1		296289831	SENSOR - PROXIMITY - INDUCTIVE - 20MM (CUBE)	6	
2	*	1802010	BOLT - 3/16" X 1" NC STOVE	8	
3		400001	NUT-3/16 NC HEX	8	
4		224769001	WASHER-#8 FLAT	10	
5		480001	WASHER-3/16 S/T LOCK	8	

Rack Switch Fig 7-2

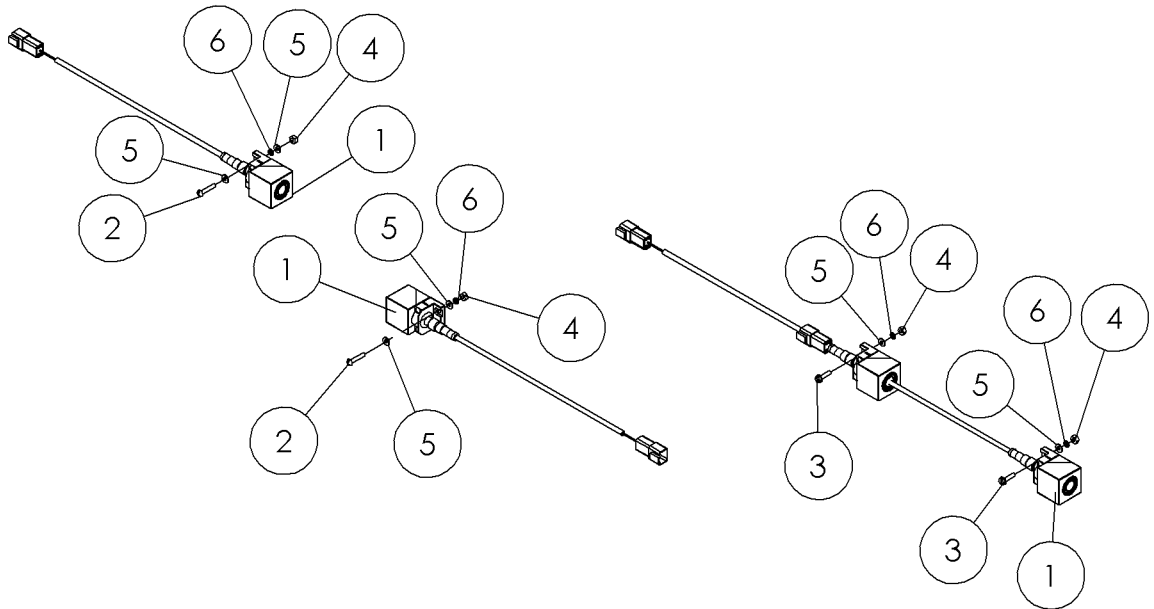
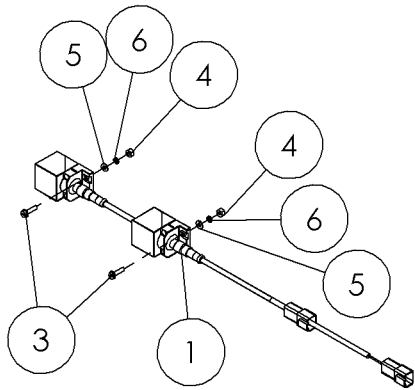


Illustration No. 296291781



## Rack Switch Fig 7-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296301537	SENSOR - PROXIMITY, INDUCTIVE - 20MM (CUBE)	6	
2		1802010	BOLT - 3/16" X 1" NC STOVE	2	
3		104209001	SCREW-10-24X3/4SLOT HEX WASH.HD	6	
4		400001	NUT-3/16 NC HEX	8	
5		224769001	WASHER-#8 FLAT	10	
6		480001	WASHER-3/16 S/T LOCK	8	

Controller Fig 7-3

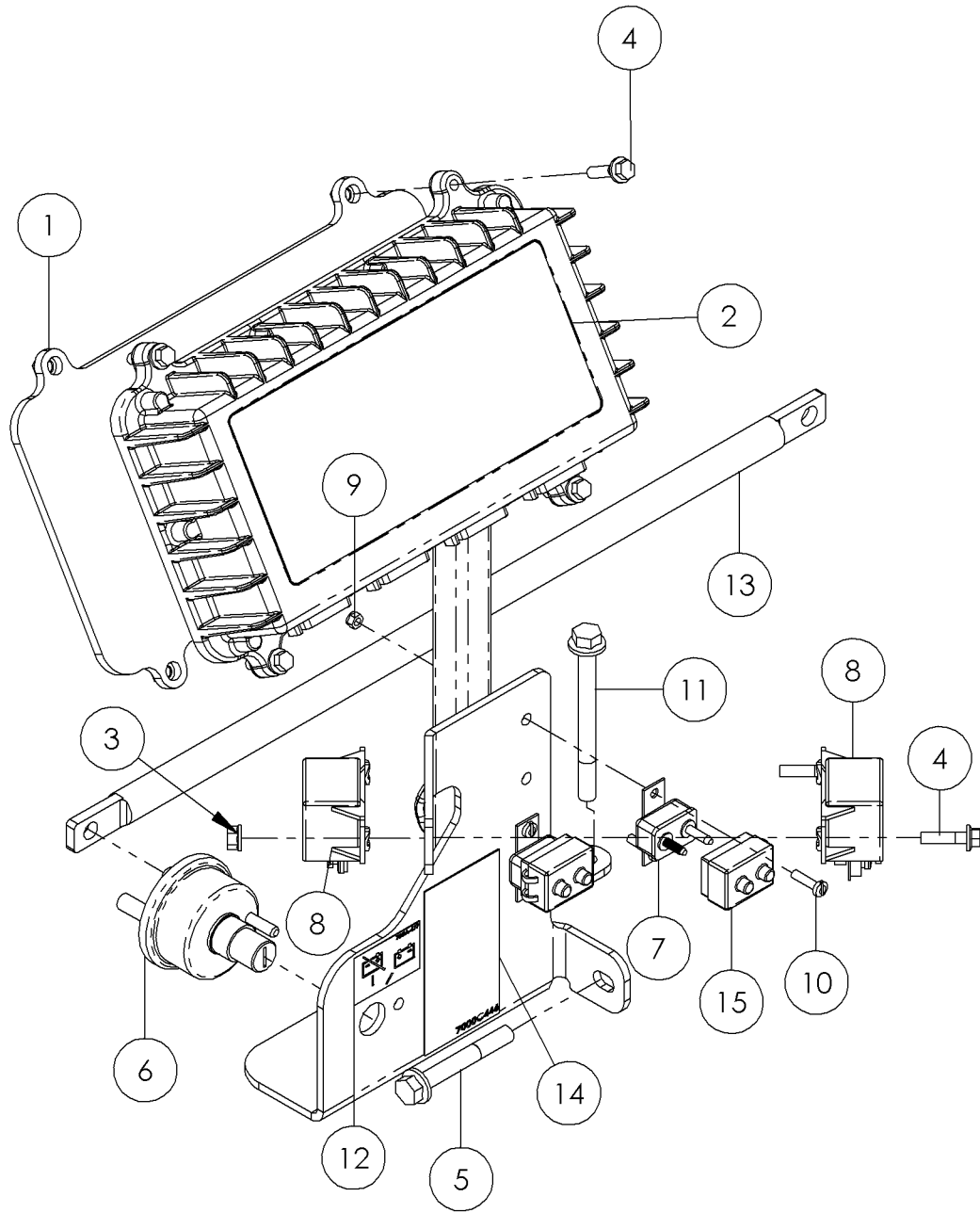


Illustration No. 296288693

Controller Fig 7-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296296011	CONTROLLER MOUNT	1	
2		296287458	ASM - C148 D20X22II	1	
3		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
4		296300754	SCREW-HFS-.25-20X1.00-GR8-YZ	6	
5		296300779	SCREW-HFS-.38-16X2.75-GR8-YZ	2	
6		904365001	DISCONNECT SWITCH	1	
7		86582001	BREAKER-40A TYPE 1 W/METALCASE	2	
8		86217001	RELAY-BOSCH SPST 75 AMP SEALED	2	
9		99042001	NUT - NYLOCK - 10 - 24 - GR2 - CZ	4	
10		1802006	BOLT-10-24 X 3/4 RND HD STOVE	4	
11		296300941	SCREW-HFS-.38-16X4.00 GR8 YZ	1	
12		700IA477	DECAL_BATTERY SWITCH (UG)	1	Domestic/International
13		296269273	CABLE - 2/0 GA. X 22" GROUND	1	
14		7000C446	DECAL - NO WELD	1	Domestic
		700IC446	DECAL - NO WELD	1	International
15		296269640	BOOT - RED COVER CIRCUIT BREAKER	2	

Throttle Fig 7-4r01

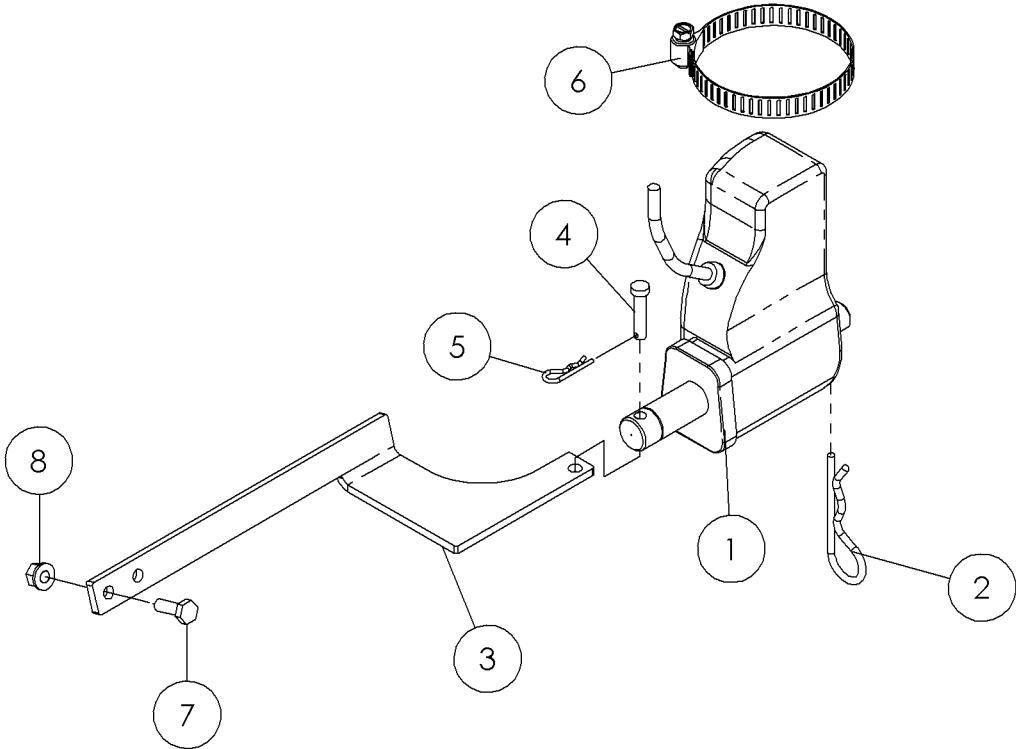


Illustration No. 296281228

## Throttle Fig 7-4r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Change Hardware
1		296266654	ACTUATOR - THROTTLE ELECTRIC	1	
2		1794003	HAIR PIN COTTER - .148 WIRE	1	
3		296299022	PLATE - THROTTLE CONNECTION	1	
4		2110007	PIN-CLEVIS 1/4X1 1/8 -63/64 UL	1	
5		1794007	HAIR PIN COTTER - .080 WIRE	1	
6		1580015	HOSE CLAMP - 3"	1	
7	*	235734001	BOLT-1/4-20X3/4 GR8 ZYC	1	
8	*	296300848	NUT-HEXFLGTL-.25-20-G-YZ	1	

Throttle Fig 7-4

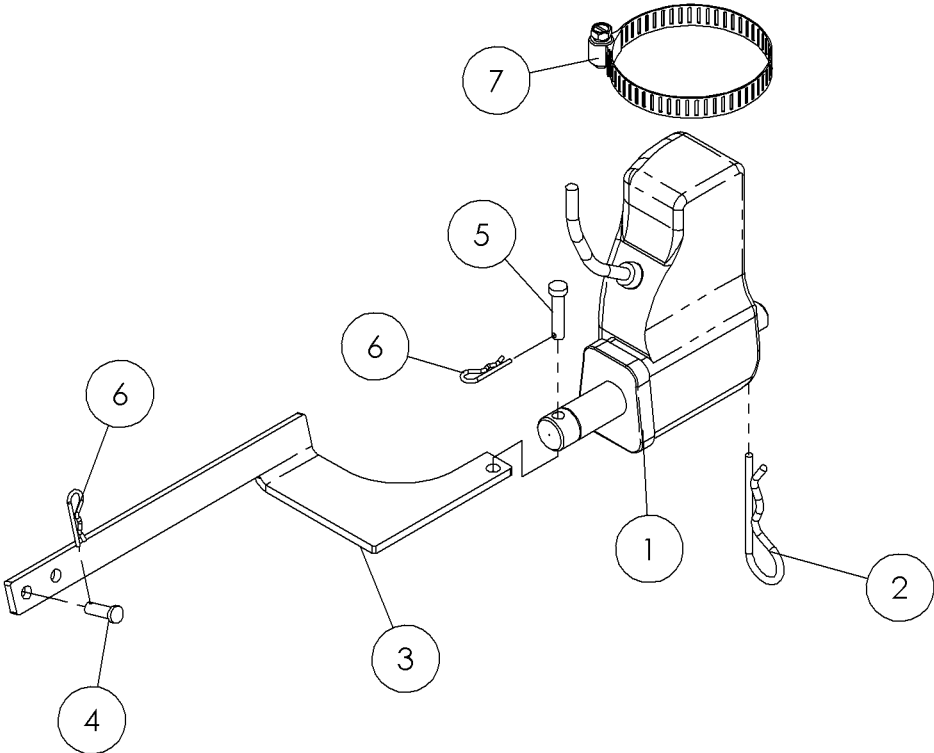


Illustration No. 296281228

## Throttle Fig 7-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296266654	ACTUATOR - THROTTLE ELECTRIC	1	
2		1794003	HAIR PIN COTTER - .148 WIRE	1	
3		296299022	PLATE - THROTTLE CONNECTION	1	
4		2110001	PIN-1/4 X 3/4 CLEVIS 21/32 UL	1	
5		2110007	PIN-CLEVIS 1/4X1 1/8 -63/64 UL	1	
6		1794007	HAIR PIN COTTER - .080 WIRE	2	
7		1580015	HOSE CLAMP - 3"	1	

Battery Fig 7-5

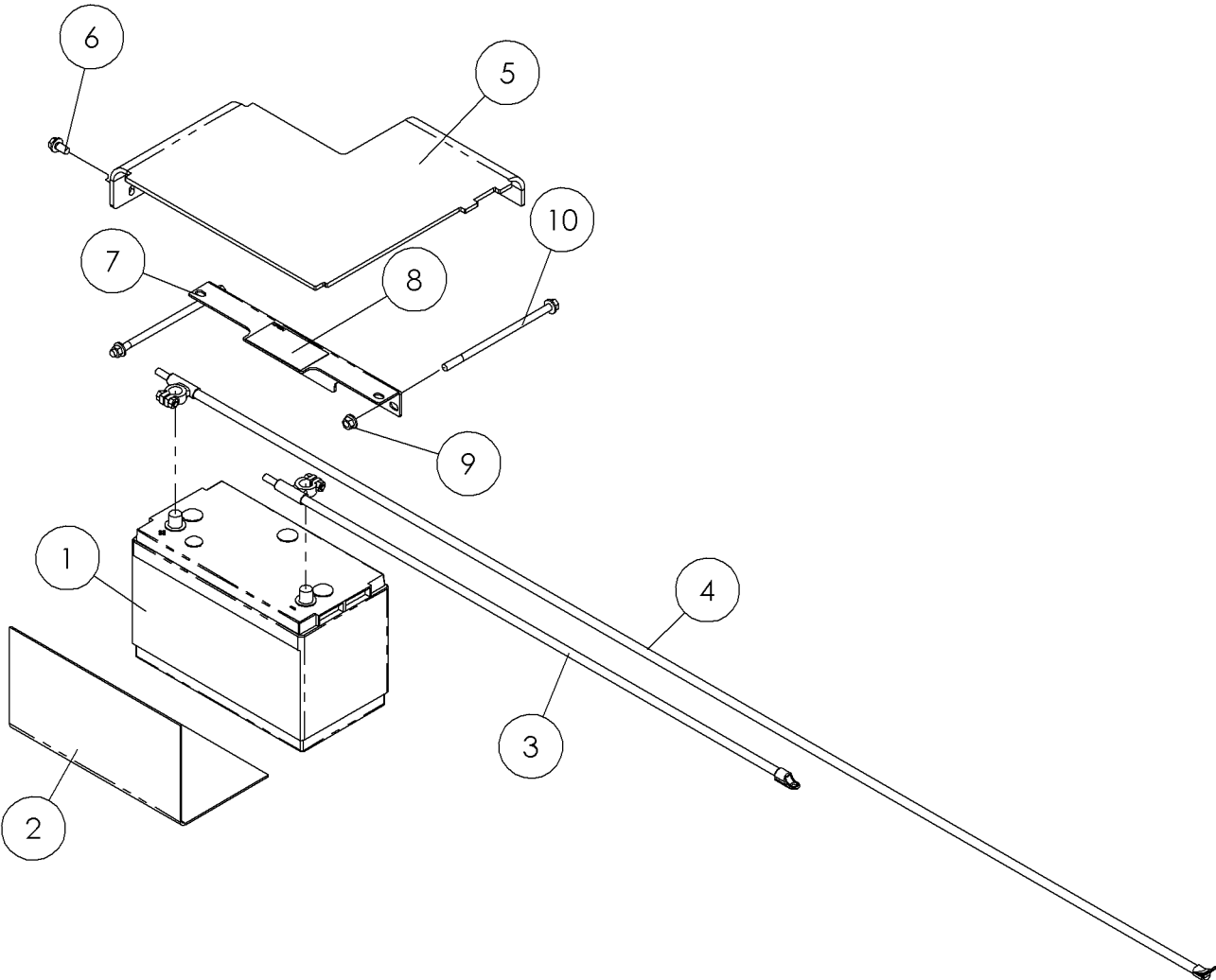


Illustration No. 296288692



## Battery Fig 7-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	BATTERY - GROUP 31 950CCA	1	
2		277044001	PAD - RUBBER	1	
3		296296041	CABLE-NEGATIVE BATTERY	1	
4		296288697	CABLE-POSITIVE BATTERY	1	
5		296296135	COVER - PLASTIC BATTERY	1	
6		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
7		296296134	PLATE-BATTERY HOLD DOWN	1	
8		7000B024	DECAL - WARNING	1	Domestic
		700IB024	DECAL - WARNING	1	International
9		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	
10		296300926	SCREW-HFS-.38-16X8.00-GR8-YZ	2	

Remote Lockout-Domestic Fig 7-6

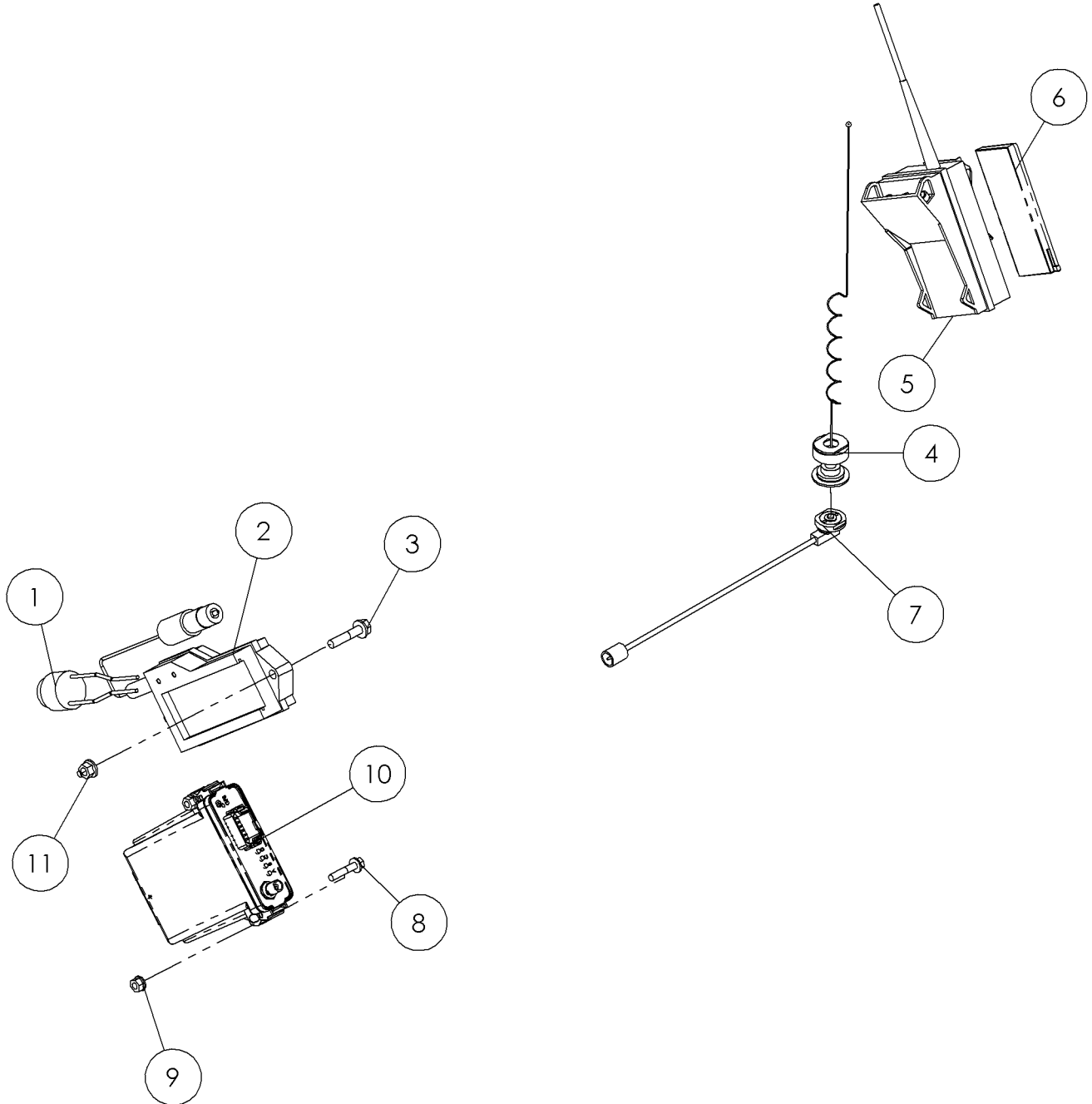


Illustration No. 296283427

## Remote Lockout-Domestic Fig 7-6

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		286920001	REMOTE LOCKOUT BUZZER	1	
2		296272392	CHARGER, 12-VOLT NBB	1	
3		296300765	SCREW-FS-.31-18X1.50-GR8-YZ	2	
4		296272364	ANTENNA -915 MHZ, 3 dBI, 1/4 WAVE	1	
5		296272303	ASM - R309LK FOR HDD	1	
6		296272400	BATTERY - 1000MA NBB	1	
7		296272366	MOUNT - ANTENNA MOTOROLA TYPE RG-58	1	
8		296300755	SCREW-HFS-.25-20X1.25-GRI-YZ	2	
9		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
10		296272506	B309LK2, CAN DOM	1	
11		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	

Remote Lockout-International Fig 7-7

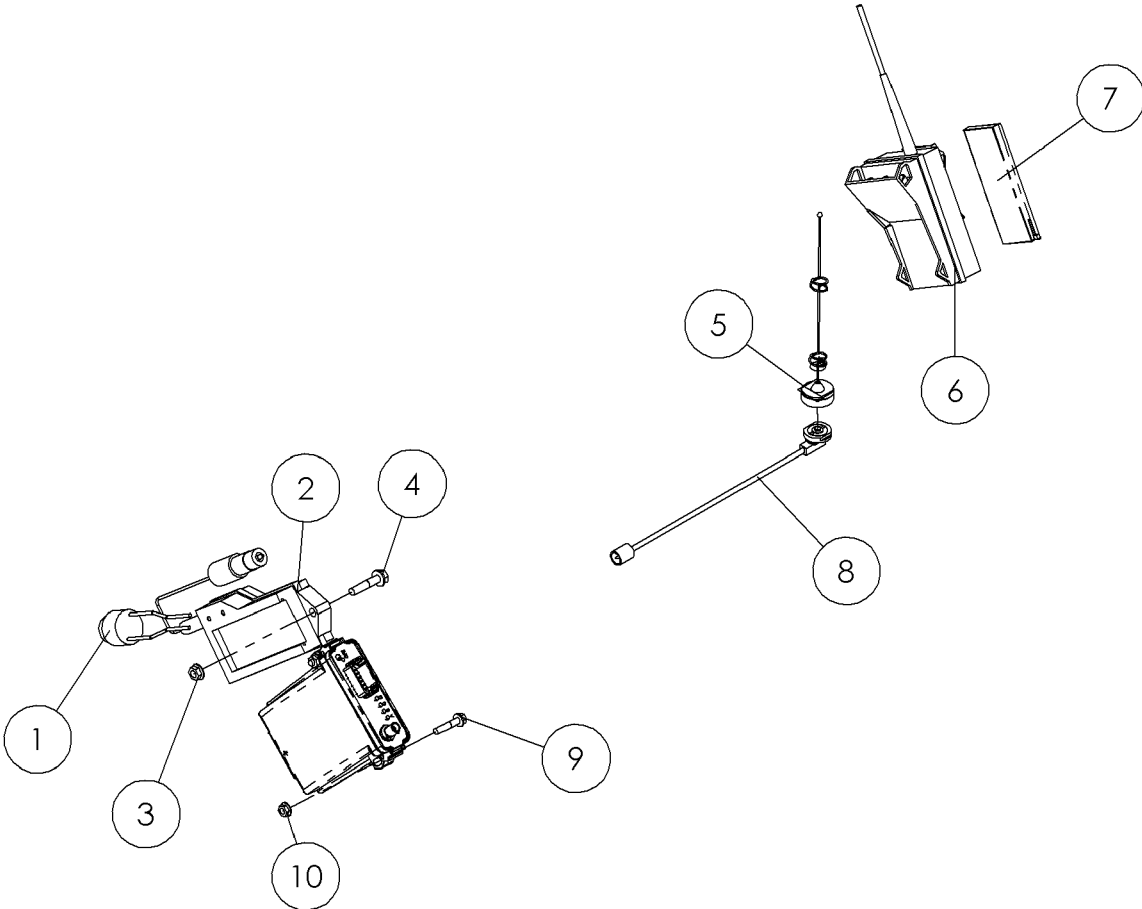


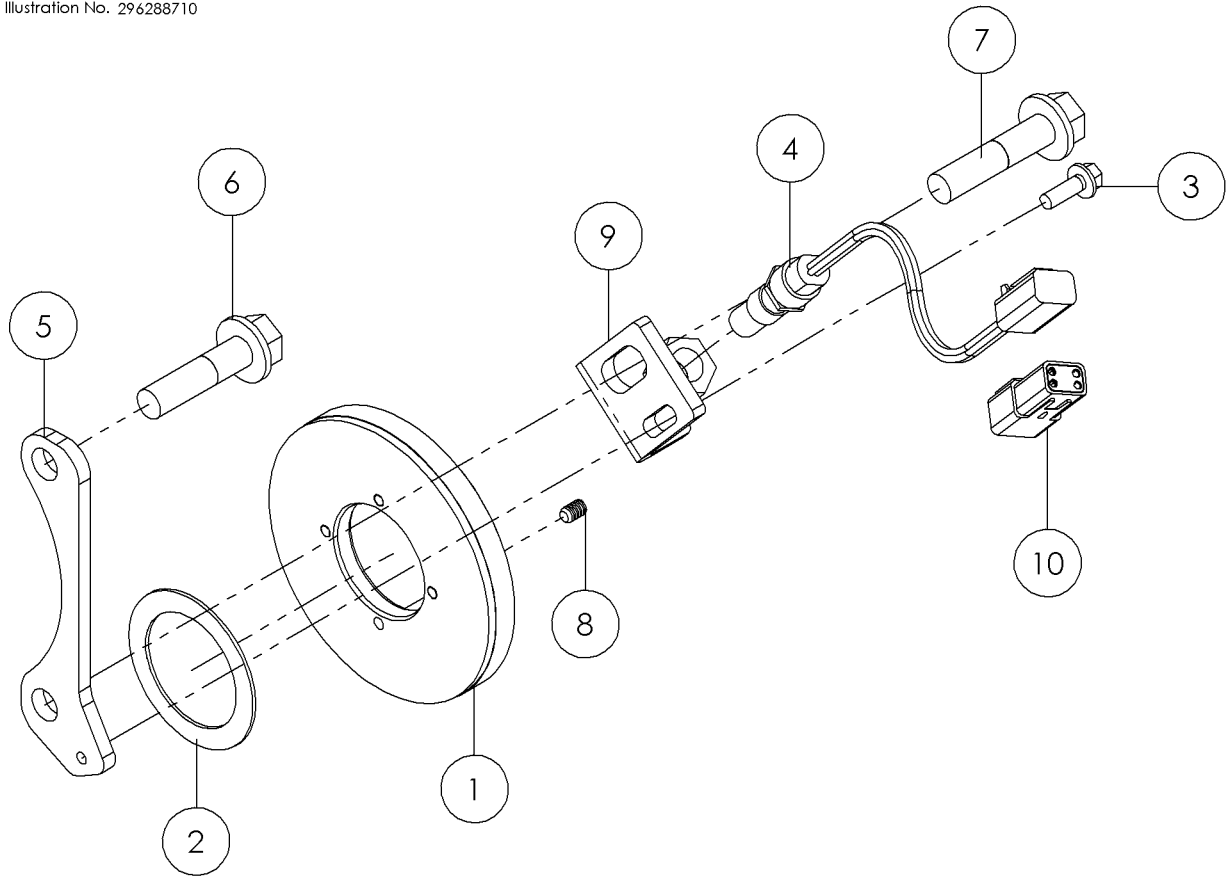
Illustration No. 296306011

## Remote Lockout-International Fig 7-7

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		286920001	REMOTE LOCKOUT BUZZER	1	
2		296272392	CHARGER, 12-VOLT NBB	1	
3		296300893	NUT-HEXFLG-.31-18-GR8-YZ	2	
4		296300765	SCREW-FS-.31-18X1.50-GR8-YZ	2	
5		296272382	ANTENNA - 2400MHZ 1/4 WAVE	1	
6		296272513	R324LK, REMOTE LOCKOUT INT	1	
7		296272400	BATTERY - 1000MA NBB	1	
8		296272366	MOUNT - ANTENNA MOTOROLA TYPE RG-58	1	
9		296300755	SCREW-HFS-.25-20X1.25-GRI-YZ	2	
10		296300891	NUT-HEXFLG-.25-20-GR8-YZ	2	
11		296272510	B324LK2, CAN INT	1	

R.A.T.T. Control Fig 7-8r01

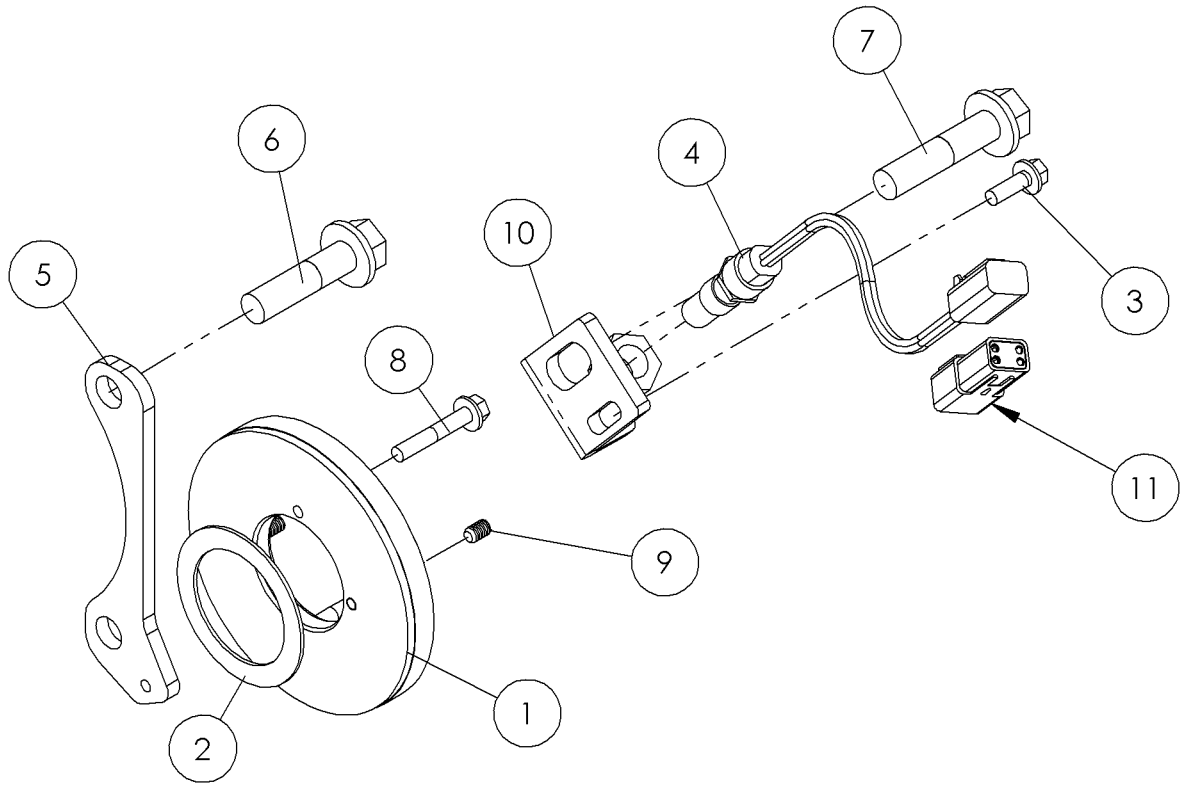
Illustration No. 296288710



## R.A.T.T. Control Fig 7-8r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296286252	ASSEMBLY - PULSE RING	1	
2		296286253	WASHER - 1.96 X 2.68 X .093 (BUNA-N)	1	
3		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	1	
4		296281808	PULSE PICKUP SENSOR	1	
5		296288712	PLATE - PULSE PICK UP MOUNT	1	
6		296300792	SCREW-HFS-.50-13X2.00-GR8-YZ	1	
7		296300793	SCREW-HFS-.50-13X2.25-GR8-YZ	1	
8		523001	SSS-1/4-20X3/8	4	
9		296296176	BRACKET PPU SENSOR	1	
10		296306290	*HARNESS - PULSE PICKUP	1	

R.A.T.T. Control Fig 7-8

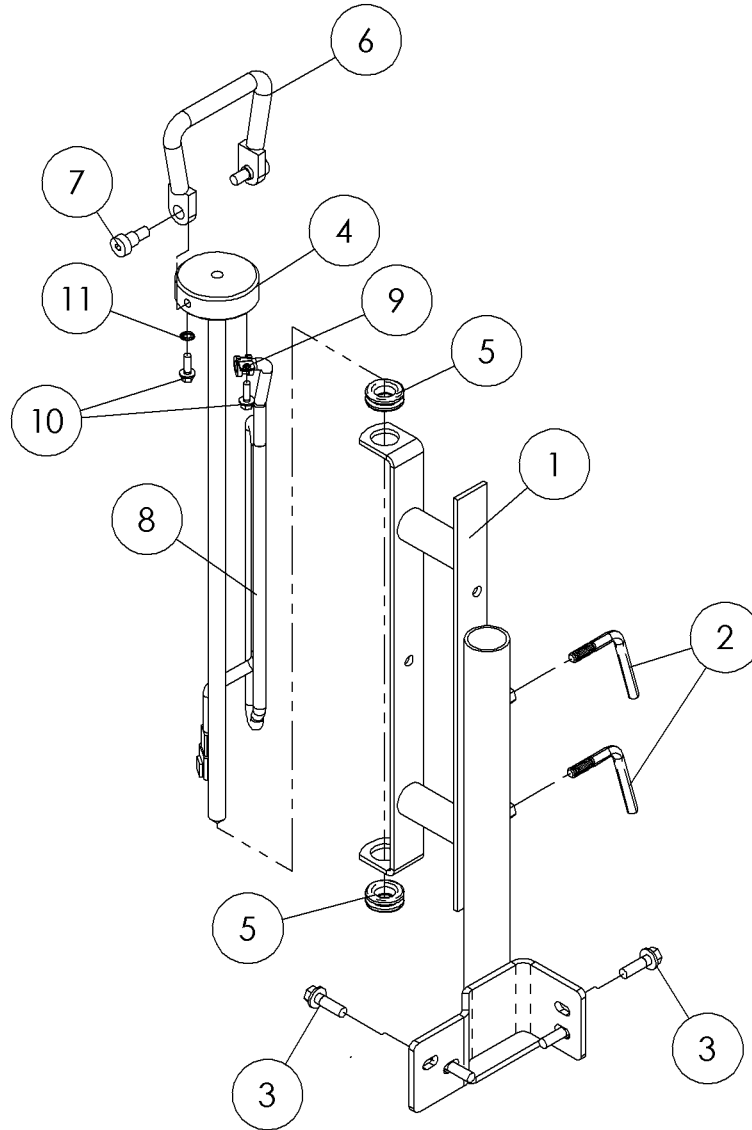




R.A.T.T. Control Fig 7-8

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296286252	ASSEMBLY - PULSE RING	1	
2		296286253	WASHER - 1.96 X 2.68 X .093 (BUNA-N)	1	
3		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	1	
4		296281808	PULSE PICKUP SENSOR	1	
5		296288712	PLATE - PULSE PICK UP MOUNT	1	
6		296300792	SCREW-HFS-.50-13X2.00-GR8-YZ	1	
7		296300793	SCREW-HFS-.50-13X2.25-GR8-YZ	1	
8		296300756	SCREW-HFS-.25-20X1.50-GR8-YZ	2	
9		523001	SSS-1/4-20X3/8 REF T12503	4	
10		296296176	BRACKET PPU SENSOR	1	
11		296306209	HARNESS-PULSE PICK UP	1	

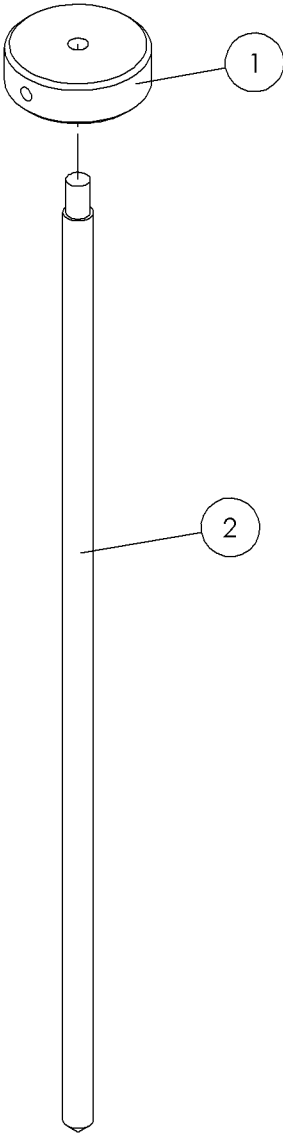
Voltage Stake/Umbrella Mount Fig 7-9



## Voltage Stake/Umbrella Mount Fig 7-9

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296294182	WELDMENT - UMBRELLA/VOLTAGE STAKE	1	
2		240038001	BOLT-TIGHTENING 3/8"	2	
3		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	4	
4		296275119	STAKE-VOLTAGE	1	Breakdown Fig. 7-9a
5		1865043	GROMMET-.75IDX1.38OD-.19GROOVE	2	
6		234164001	HANDLE-VOLTAGE STAKE	1	
7		240056001	SCREW-SHSS-.50X.50-.38-16THD-CZ	2	
8		296275117	HARNESS-VOLTAGE STAKE	1	
9		296275118	CLAMP - #8	1	
10		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	3	
11		481013	WASHER-1/4 EST. STAR	2	

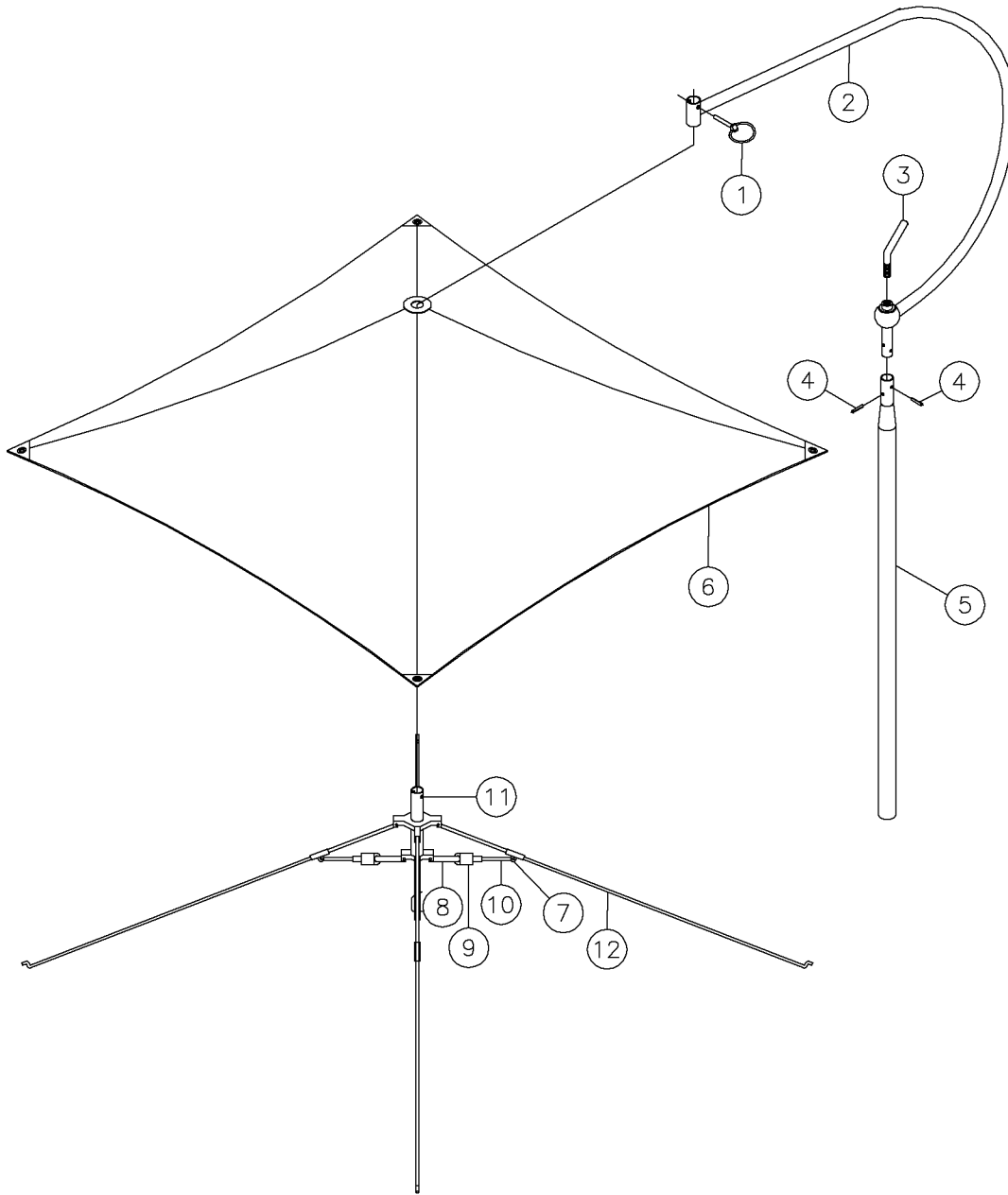
Components-Voltage Stake Fig 7-9z01



Components-Voltage Stake Fig 7-9z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296275107	HEAD - VOLTAGE STAKE	1	
2		904155001	VOLTAGE STAKE	1	

Components-Umbrella Fig 7-9z02



## Components-Umbrella Fig 7-9z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Change Part Number
1		1797003	PIN-QUICK LATCH 1/4"- XCX 6M DIA ZYC	1	
2		238181003	CURVED SHAFT	1	
3		238181005	LOCKING HANDLE	1	
4		1978011	PIN ROLL 3/16 X 1 ZINC	2	
5		238181007	SUPPORT SHAFT-UMBRELLA	1	
6		240103001	SHEATH-UMBRELLA	1	
7		238181011	RIVET-PUSH PIN	12	
8		238181013	TUBE-PUSH ROD	4	
9		238181015	CLIP-PUSH ROD LOCKING SPRING	4	
10		238181017	PUSH ROD	4	
11		238181019	CENTER TUBE W/ SPIDERS	1	
12		238181021	BOW W/ CLEVIS	4	
	*	238181001	UMBRELLA-ASSY (PARTS REPAIR)		Inc All Items In Figure.

Joysticks Fig 7-10r01

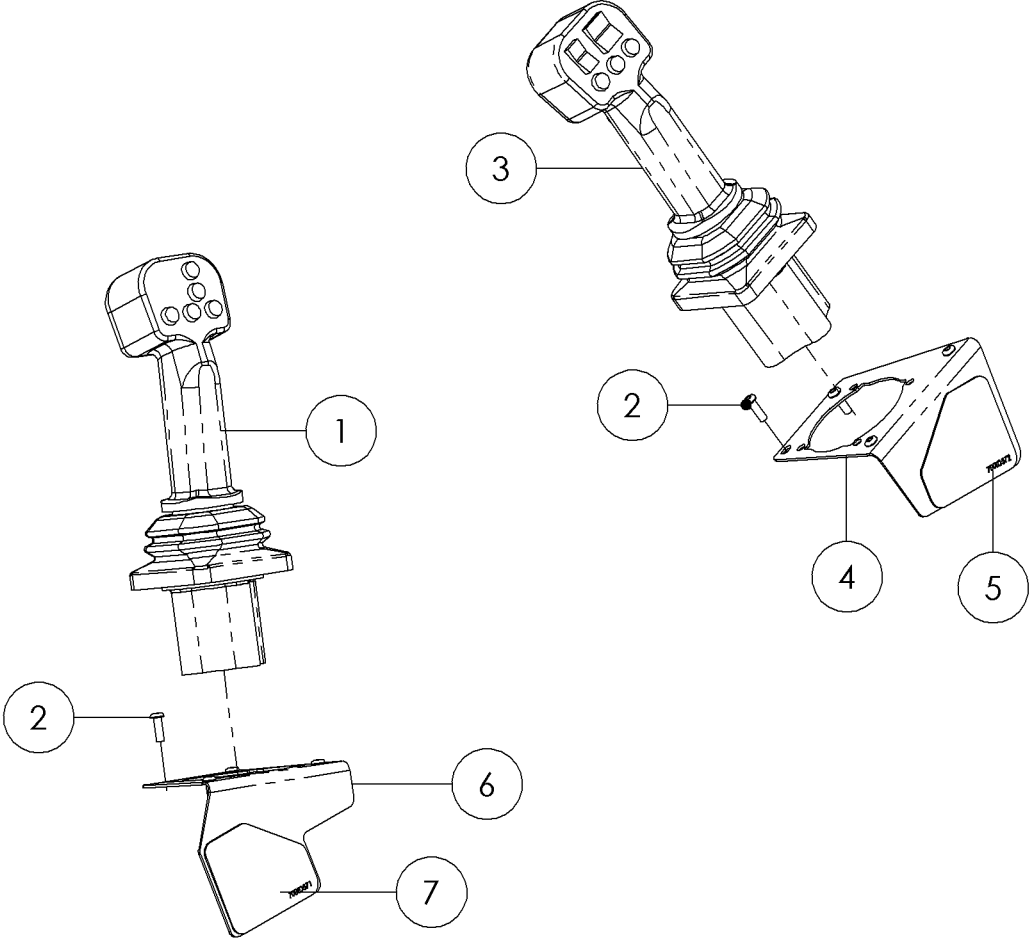


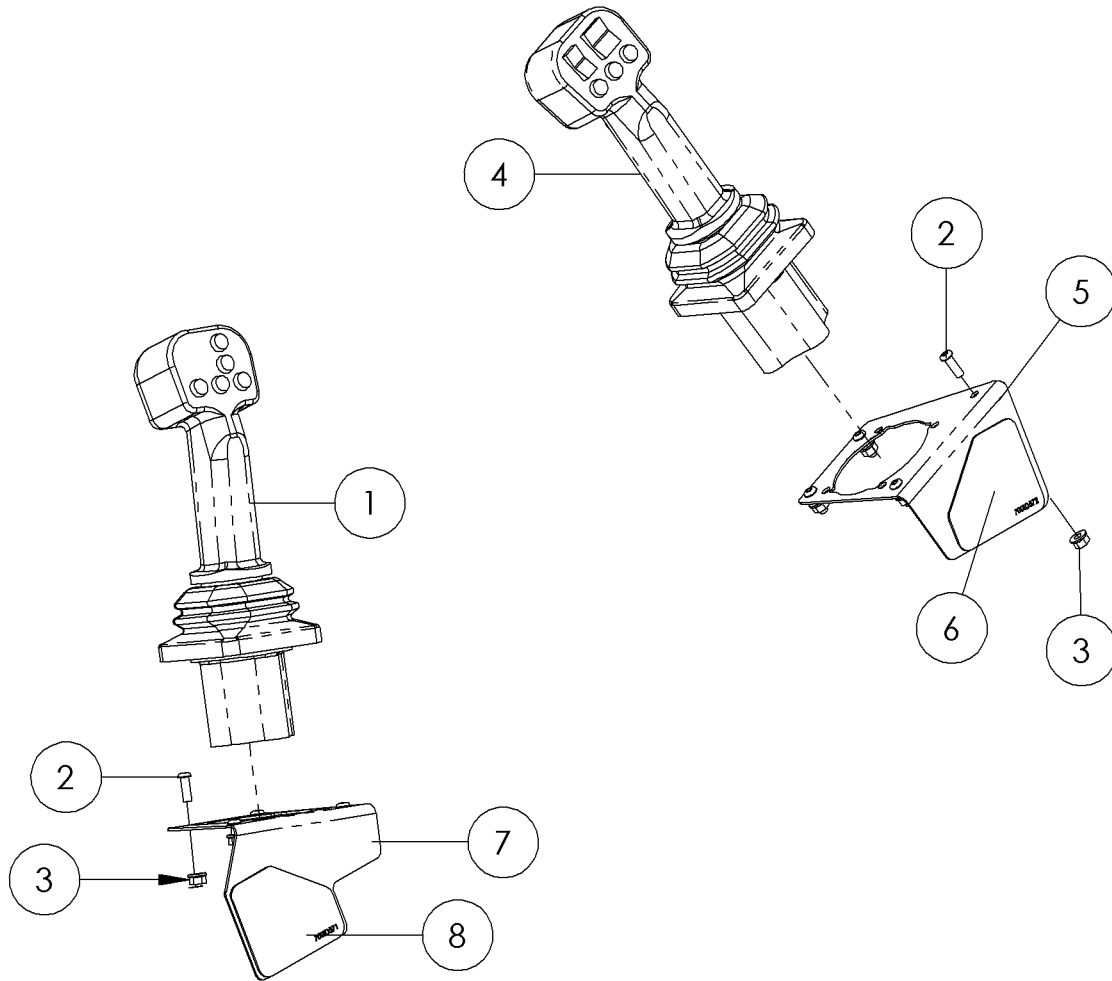
Illustration No. 296294228



## Joysticks Fig 7-10r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Remove Hardware.
1		296294244	HANDLE GRIP ASSY - LH JOYSTICK	1	Breakdown Fig. 7-10a
2		278986001	SCREW - 1/4 - 20 X 3/4 GR8 SBHCS CZ	8	
3		296294245	HANDLE GRIP ASSY - RH JOYSTICK	1	Breakdown Fig. 7-10b
4		296294242	PLATE - JOYSTICK MOUNT RH	1	
5		700ID572	DECAL - RIGHT JOYSTICK CONTROL	1	
6		296294243	PLATE - JOYSTICK MOUNT LH	1	
7		700ID571	DECAL - LEFT JOYSTICK CONTROL	1	

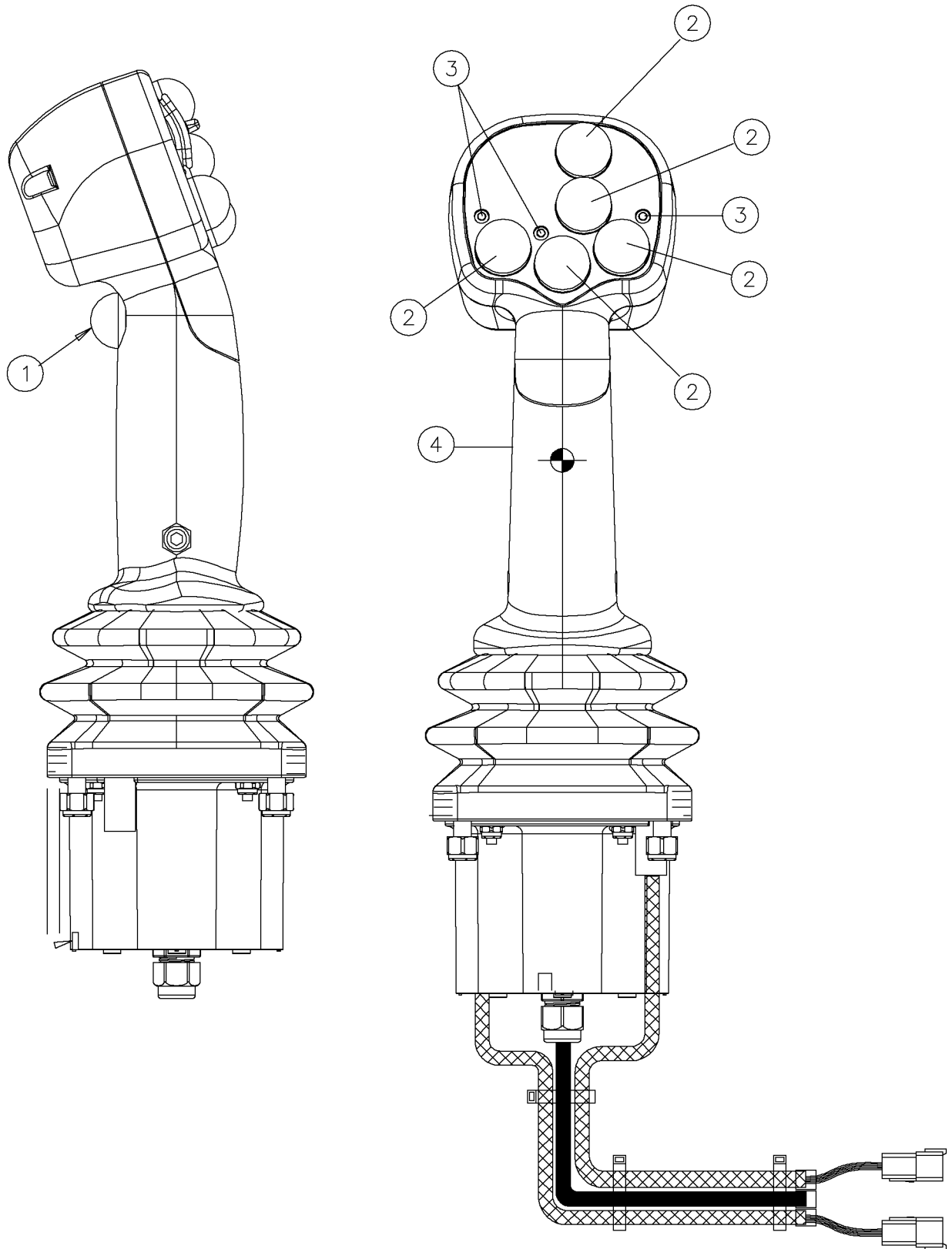
Joysticks Fig 7-10



## Joysticks Fig 7-10

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296294244	HANDLE GRIP ASSY - LH JOYSTICK	1	Breakdown Fig. 7-10a
2		278986001	SCREW - 1/4 - 20 X 3/4 GR8 SBHCS CZ	8	
3		296300848	NUT-HEXFLGTL-.25-20-G-YZ	8	
4		296294245	HANDLE GRIP ASSY - RH JOYSTICK	1	Breakdown Fig. 7-10b
5		296294242	PLATE - JOYSTICK MOUNT RH	1	
6		700ID572	DECAL - RIGHT JOYSTICK CONTROL	1	Domestic/International
7		296294243	PLATE - JOYSTICK MOUNT LH	1	
8		700ID571	DECAL - LEFT JOYSTICK CONTROL	1	Domestic/International

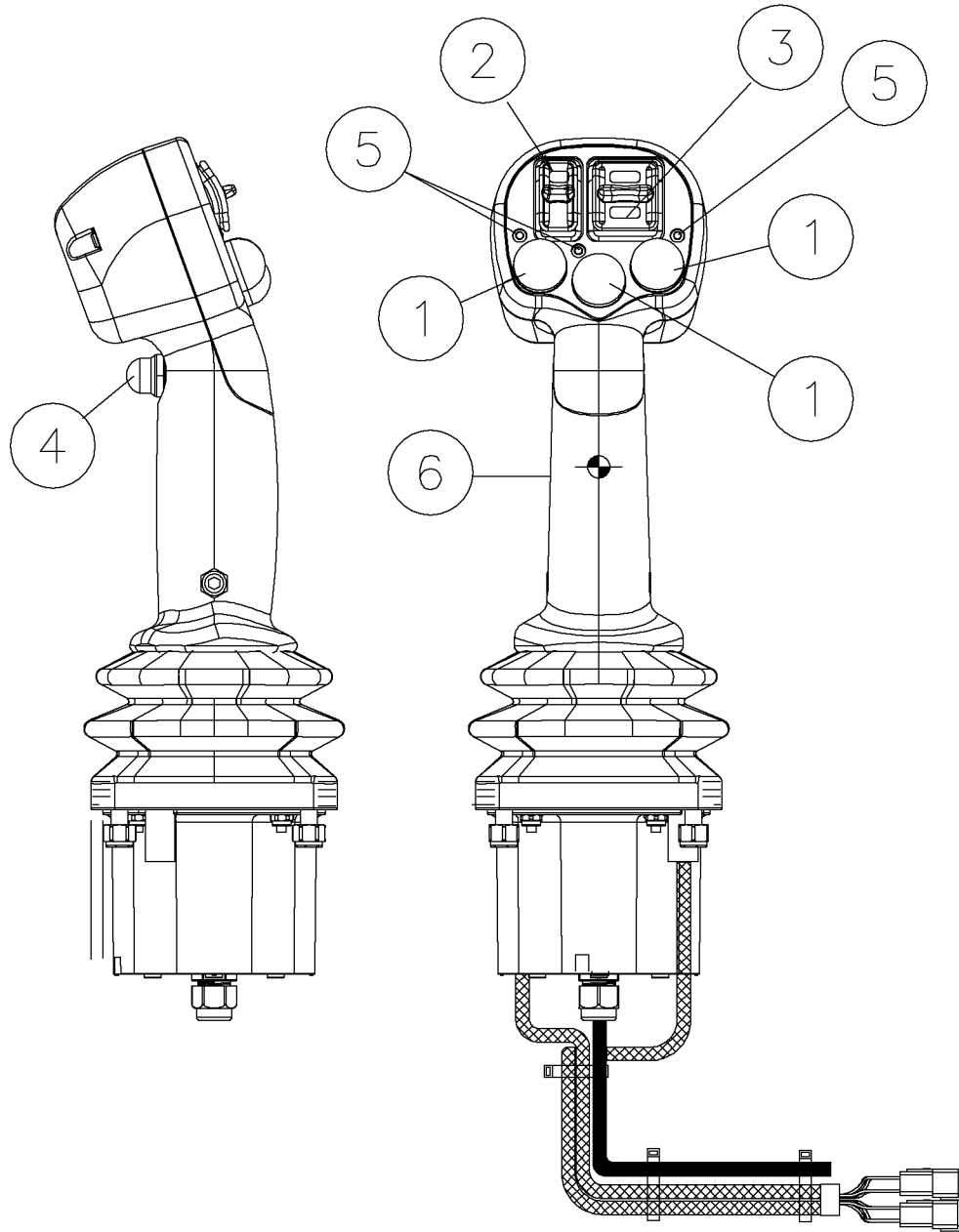
Components-Joystick(LH) Fig 7-10z01



## Components-Joystick(LH) Fig 7-10z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296271138	SWITCH	1	
2		296271137	SWITCH	5	
2		296271135	BOOT -RUBBER	5	
3		296302422	*LIGHT - GREEN LED	3	
4		296294244	HANDLE GRIP ASSY - LH JOYSTICK		Inc. All Items In Figure.

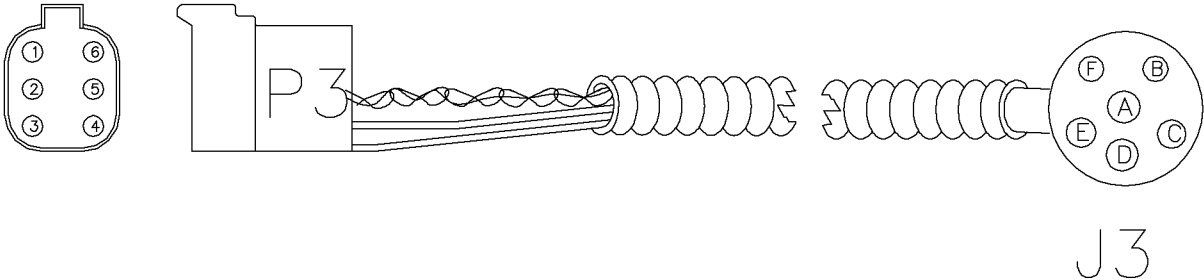
Components-Joystick(RH) Fig 7-10z02



## Components-Joystick(RH) Fig 7-10z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296271137	SWITCH	3	
1		296271140	SWITCH	3	
2		296271141	ROCKER SWITCH	1	
2		296302320	BOOT COVER	1	
3		296302376	ROCKER SWITCH	1	
3		296302321	BOOT COVER	1	
4		296271140	SWITCH	1	
5		296302422	*LIGHT - GREEN LED	3	
6		296294245	HANDLE GRIP ASSY - RH JOYSTICK		Inc. All Items In Figure.

Harness-Strike Alert Fig 7-11

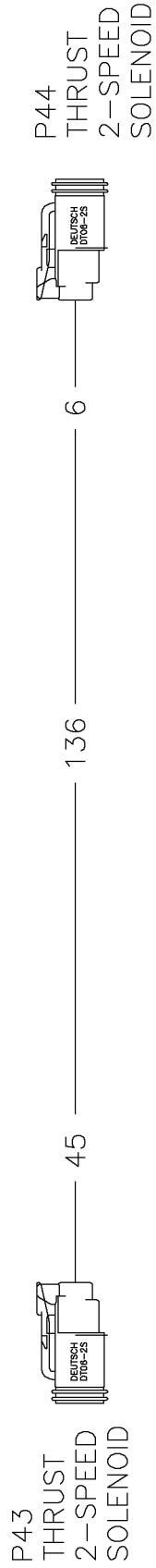




Harness-Strike Alert Fig 7-11

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		296280266	WIRE HARNESS-STRIKE ALERT COIL	1	

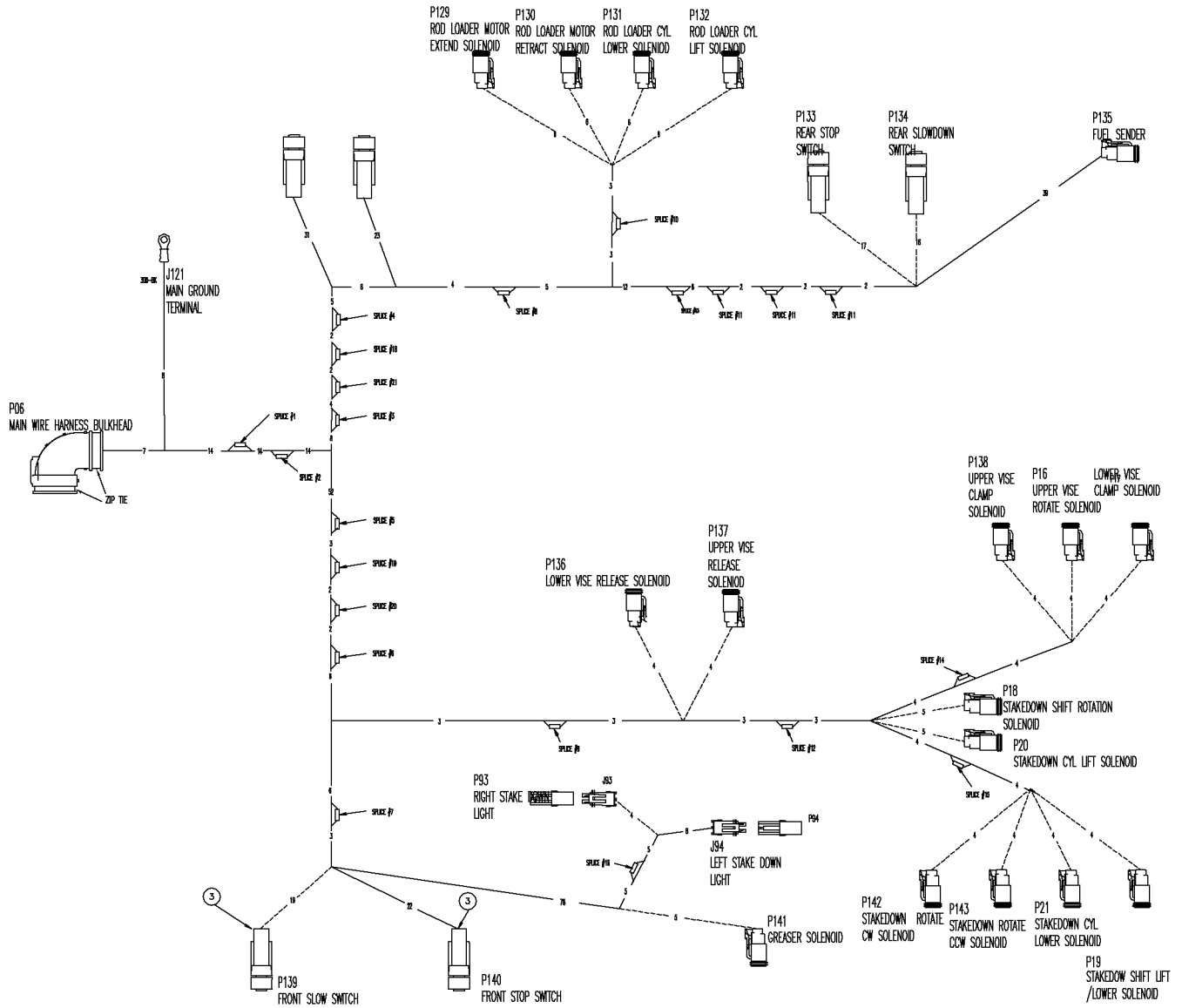
Harness-Hose Carrier Fig 7-12



## Harness-Hose Carrier Fig 7-12

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Updated Drawing
		296296161	HARNESS - HOSE CARRIER	1	

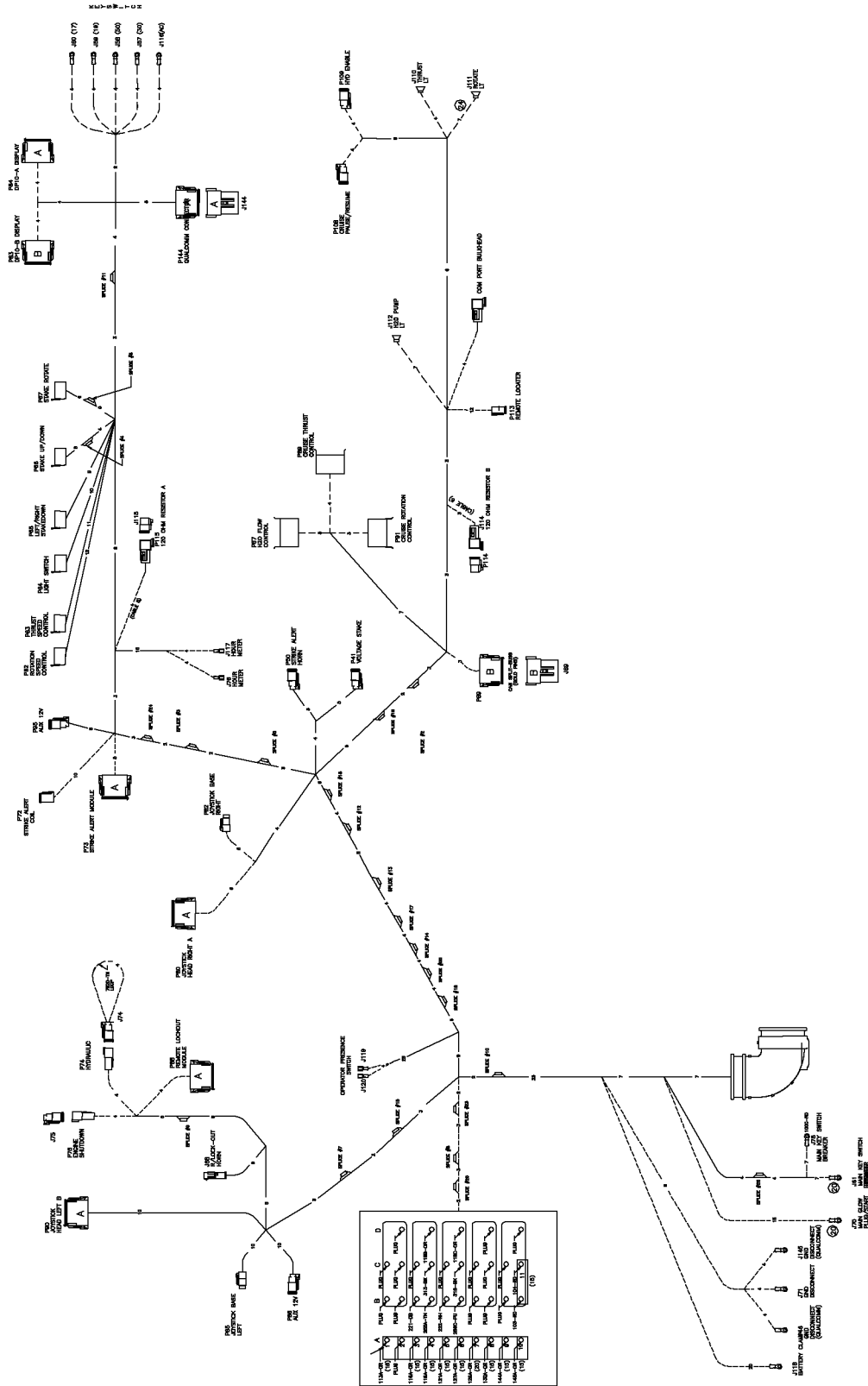
Harness-Rack Fig 7-13



Harness-Rack Fig 7-13

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		296288700	RACK WIRE HARNESS	1	

Harness-Operator Station (S/N 255-) Fig 7-14r01



## Harness-Operator Station (S/N 255-) Fig 7-14r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	July, 2008		Add 440 Wire To Harness
	*	296288701	OPERATOR STATION WIRE HARNESS	1	(S/N 255-)

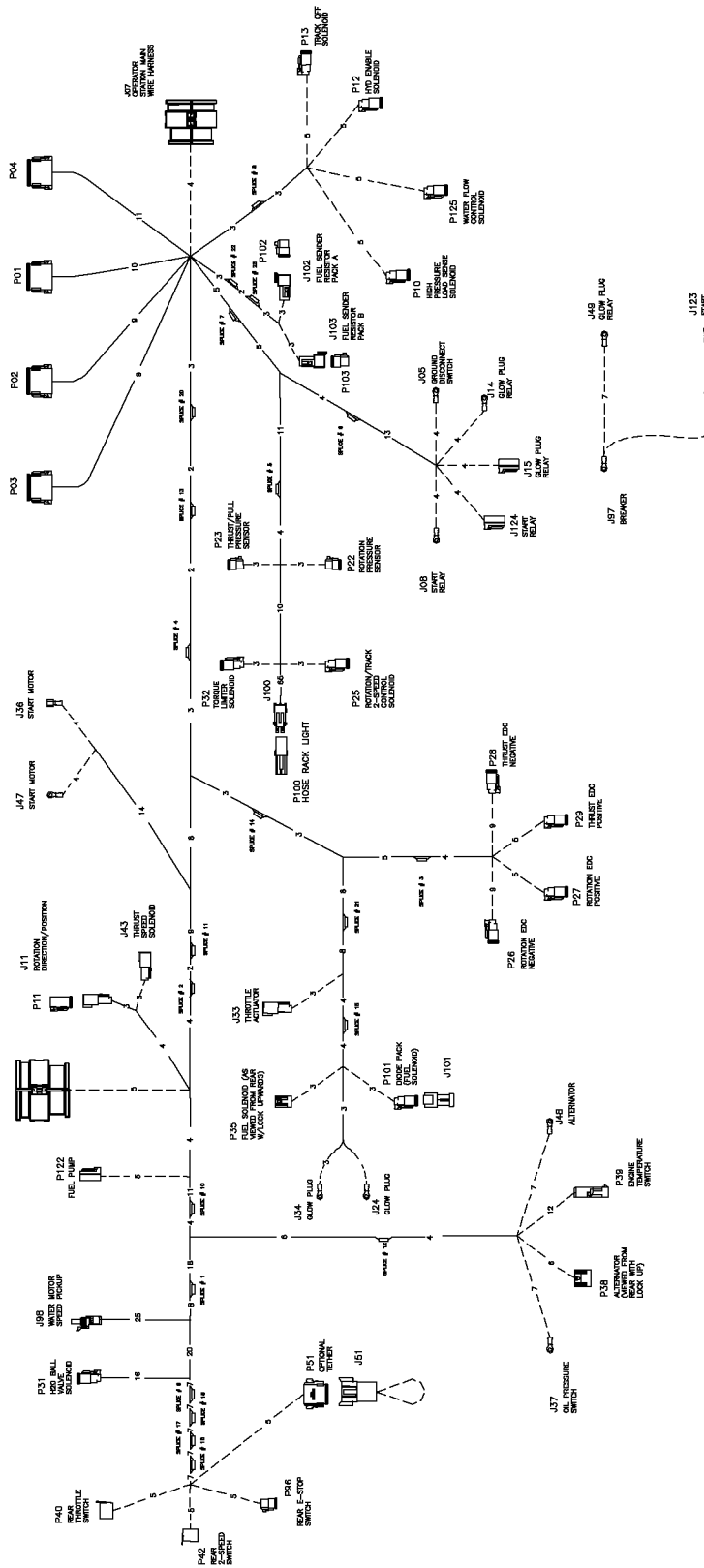




## Harness-Operator Station (S/N 101-254) Fig 7-14

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Add Wire To Harness
	*	296288701	OPERATOR STATION WIRE HARNESS	1	

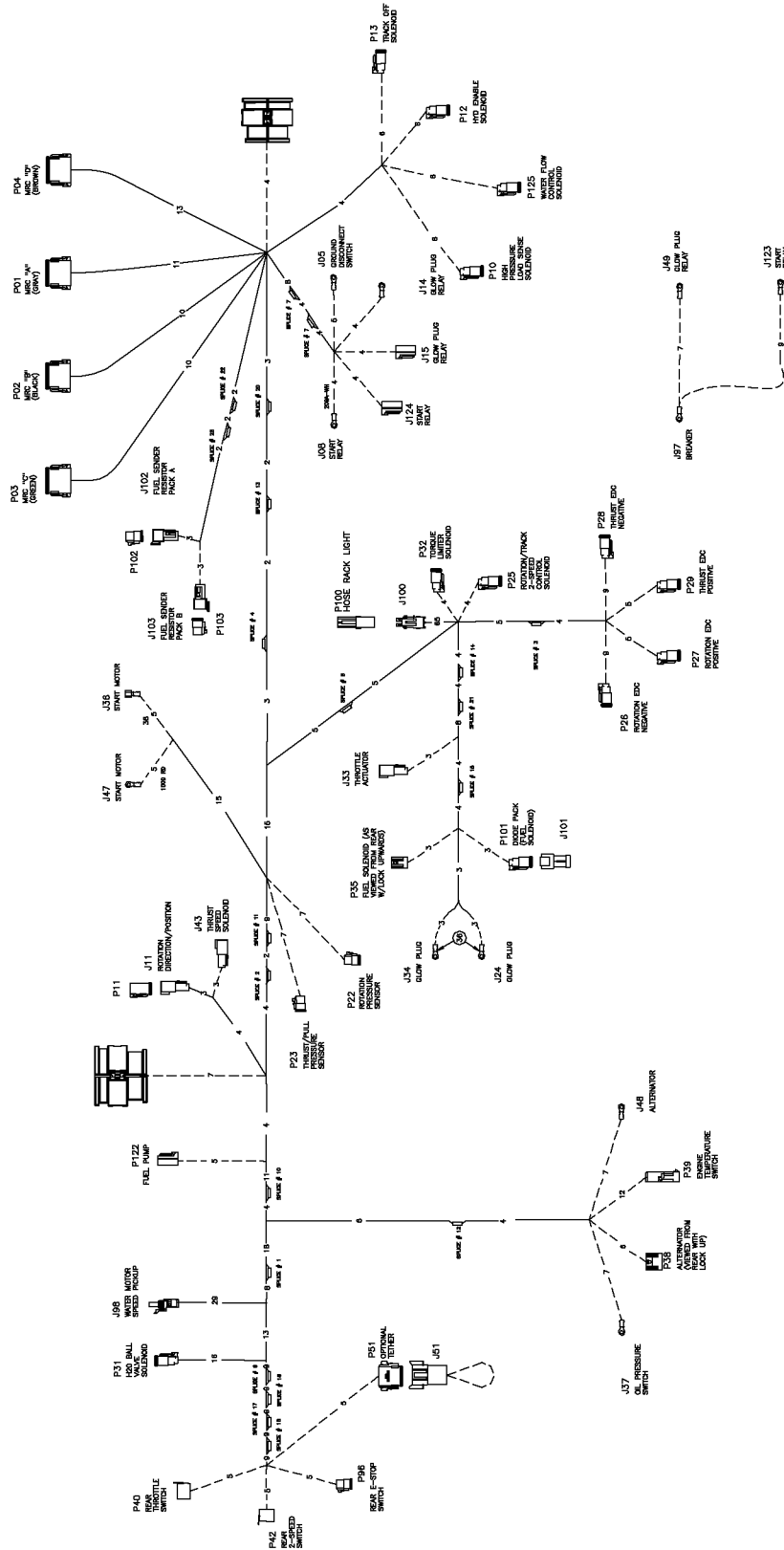
Harness-Engine Bay (316-) Fig 7-15r01



Harness-Engine Bay (316-) Fig 7-15r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		296288702	*ENGINE BAY WIRE HARNESS	1	(S/N 316-)

Harness-Engine Bay (101-315) Fig 7-15

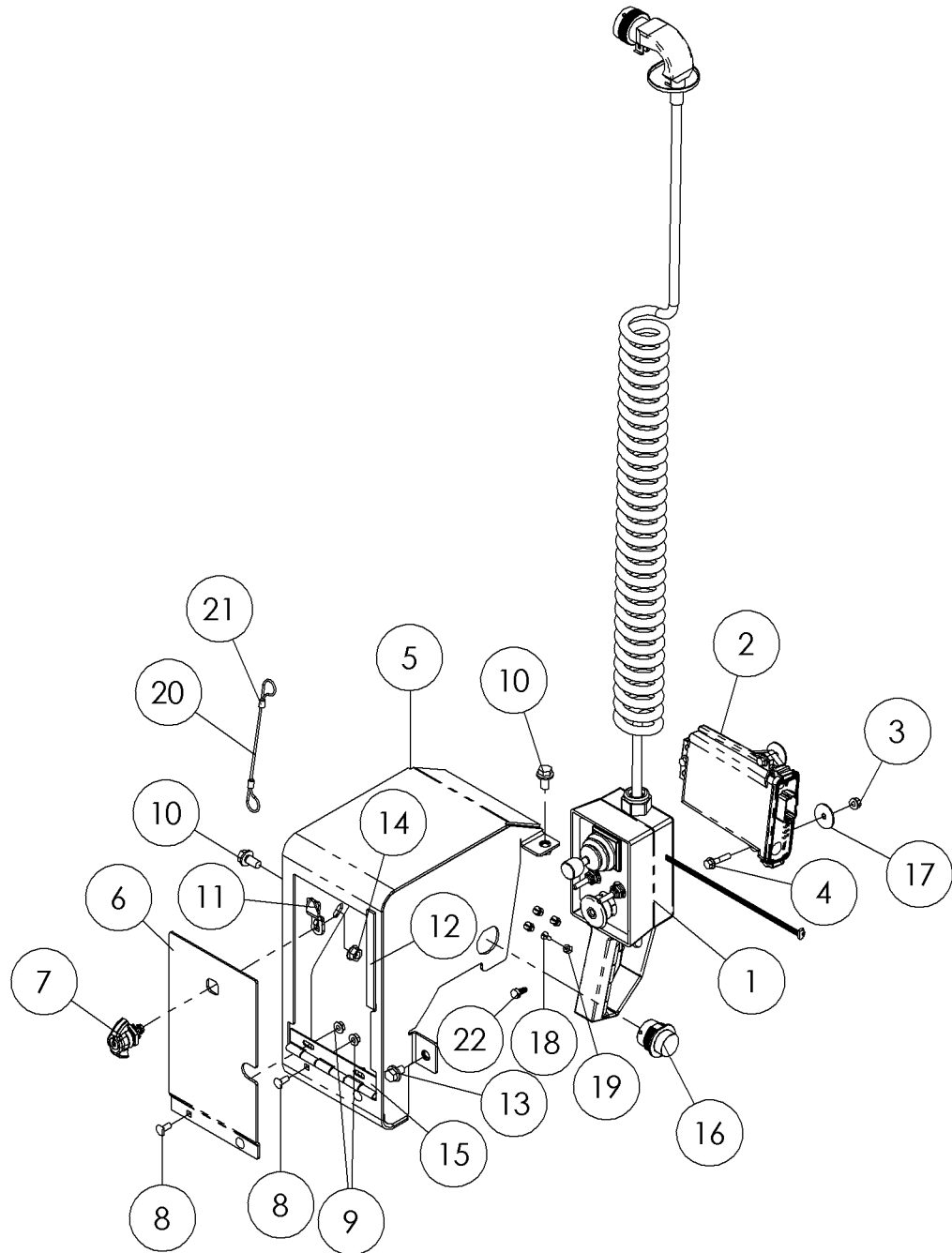


Harness-Engine Bay (101-315) Fig 7-15

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		296288702	ENGINE BAY WIRE HARNESS	1	

Tether Tracking Control Fig 7-16r01

Illustration No. 296296160



## Tether Tracking Control Fig 7-16r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296293867	TETHER CONTROL BOX ASSEMBLY	1	Breakdown Fig. 7-16z01
2		296252625	C112 NAVIGATOR TETHER CONTROL	1	
3		296300848	NUT-HEXFLGTL-.25-20-G-YZ	3	
4		296300755	SCREW-HFS-.25-20X1.25-GRI-YZ	3	
5		296306024	*WELDMENT - TETHER STORAGE	1	
6		296306022	PLATE - TETHER ACESS DOOR	1	
7		163642892	CAM-LATCH LOCKABLE WING KNOB	1	
8		373005	BOLT-1/4-20X5/8 GR5 CARRIAGE	4	
9		1809005	NUT-1/4 SM FLGE T.L.	4	
10		296300771	SCREW-HFS-..38-16X.75GR8-YZ	3	
11		163644748	CAM-10MM GRIP LENGTH	1	
12		282764001	WEATHER STRIP	1	
13		296300922	SCREW-HFS-.38-16X50-GR8-YZ	1	
14		296300895	NUT-HEXFLG-.38-16-GR8-YZ	2	
15		212832001	HINGE-FUEL FILLER DOOR	1	
16		296296137	HARNESS - WIRE TETHER CONTROL	1	
17		296257377	WASHER - FENDER - .25 X 1.25-16 GA.CZ	3	
18		57200001	SCREW-#8-32X1/2 RND.HD.MACH.	4	
19		69759001	LOCK NUT-#8-32 NYLON INSERT PL	4	
20		1830007	CABLE - 3/32" NYLON COATED (FT)	1	
21		1838001	CONNECTOR-WIRE (ETC)	2	
22		156723001	CABLE TIE ANCHOR	1	

Tether Tracking Control Fig 7-16

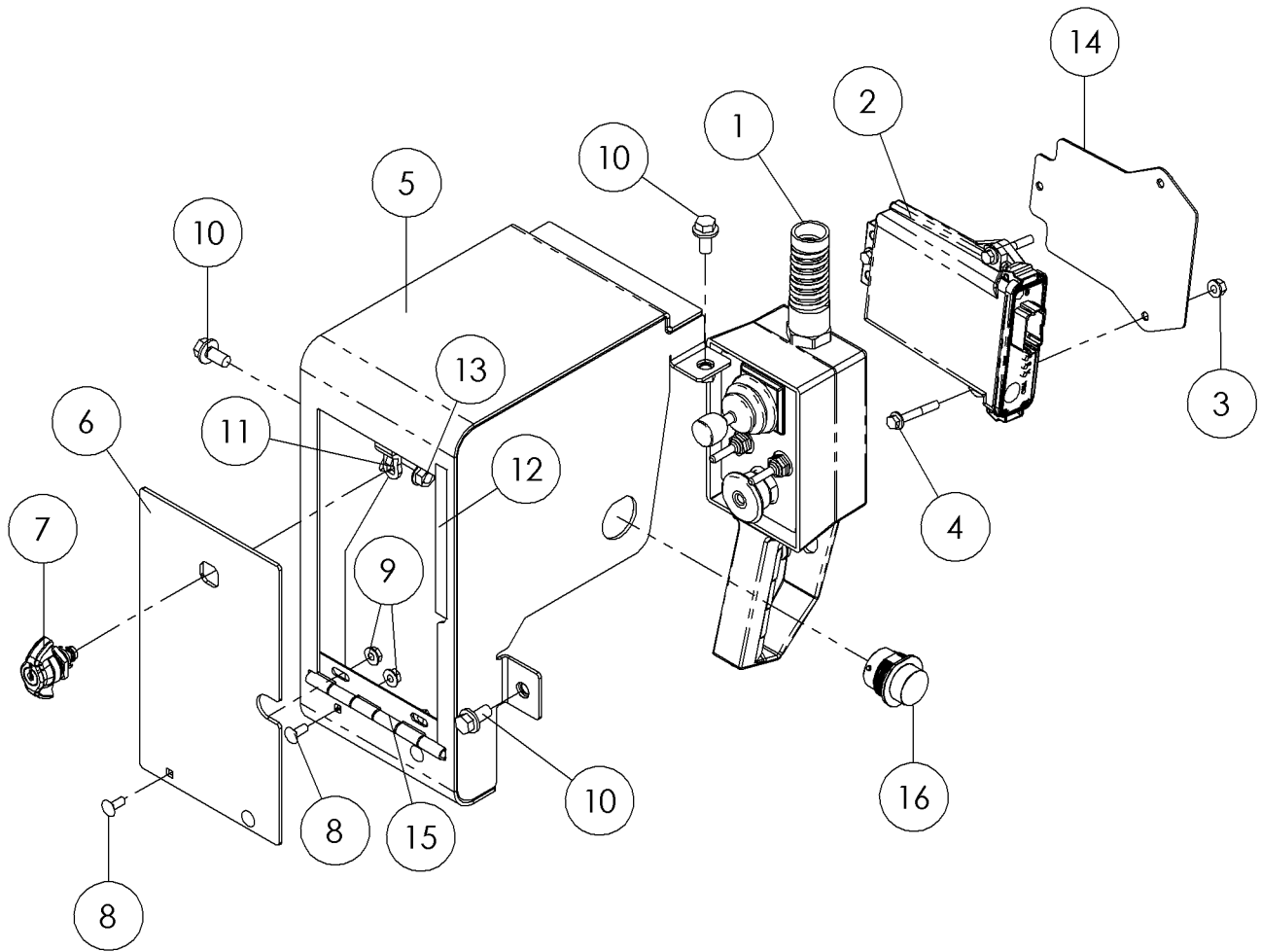


Illustration No. 296296160



## Tether Tracking Control Fig 7-16

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Addition To Manual
1		296293867	TETHER CONTROL BOX	1	Breakdown Fig. 7-16a
2		296252625	CONTROLLER-C112 NAVIGATOR TETHER	1	
3		296300848	NUT-HEXFLGTL-.25-20-G-YZ	3	
4		296300757	SCREW-HFS-.25-20x.50-GR8-YZ-SMOOTH	3	
5		296306024	WELDMENT - TETHER STORAGE	1	
6		296306022	PLATE - TETHER ACESS DOOR	1	
7		163642892	CAM-LATCH LOCKABLE WING KNOB	1	
8		373005	BOLT-CARG-.25-20X.63-GR5-CZ	4	
9		1809005	NUT-SMFLGTL-.25-20-G-CZ	4	
10		296300771	SCREW-HFS-.38-16x.75-GR8-YZ	4	
11		296294230	CAM - 10MM GRIP	1	
12		282764001	WEATHER STRIP	1	
13		296300895	NUT-HEXFLG-.38-16-GR8-YZ	2	
14		296294186	PLATE - CONTROLLER MOUNT	1	
15		212832001	HINGE-FUEL FILLER DOOR	1	
16		296296137	HARNESS - WIRE TETHER CONTROL	1	

Tether Control Box Fig 7-16z01

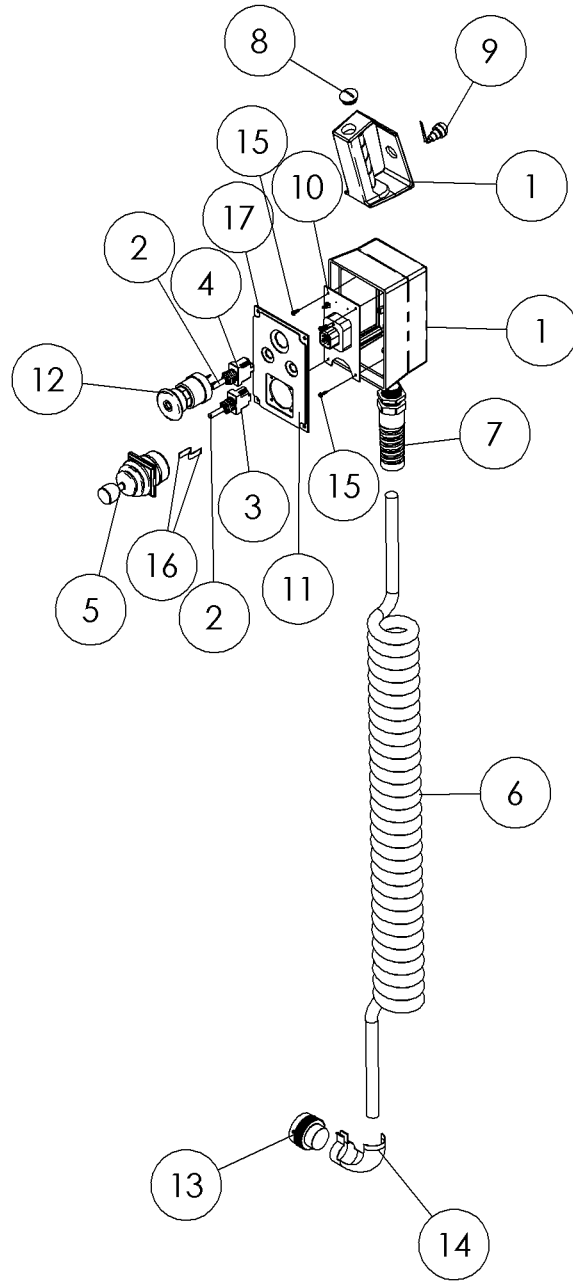


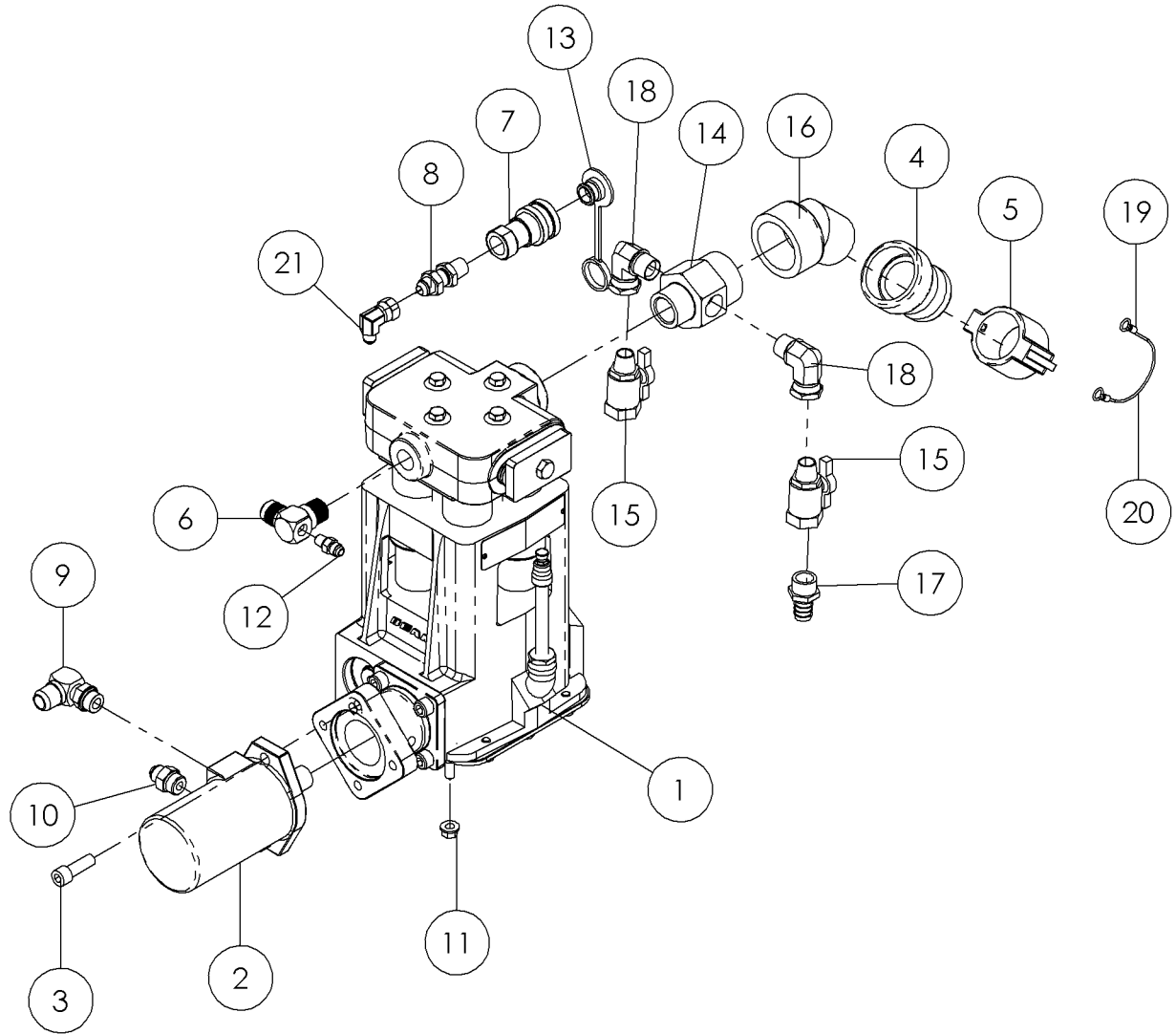
Illustration No296293867.

## Tether Control Box Fig 7-16z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296293865	TETHER CONTROL BOX MACHINED	1	
2		5537001	COVER - TOGGLE SWITCH	2	
3		57938001	SWITCH-8510K2	1	
4		67081001	MICROSWITCH 88881NT1-3	1	
5		296296156	JOYSTICK ROUND GATE XY	1	
6		296296138	HARNESS-WIRE TETHER CORD	1	
7		296296157	STRAIN RELIEF	1	
8		296296158	FITTING-PLUG M20 X 1.5	1	
9		296296159	Deadman Switch for Tether Control Box	1	
10		296269955	PCB Assy., Tether Control Box	1	
11		700ID605	DECAL TETHER CONTROLLER	1	
12		296259684	BUTTON, RED PUSH/PULL	1	
13		279408001	14 WAY PLUG - HDP20 SERIES	1	
14		296304674	DEUTSCH 90 DEG Strain Relief HD 18	1	
15		296304684	420X3/8 SS SCREW	4	
16		296304628	8 CONNDUCTOR RIBBON	1	
17		296304638	TETHER CONTROL TOP PLATE	1	

Water Pump (S/N 302-) Fig 8-1r02

Illustration No. 296284487



## Water Pump (S/N 302-) Fig 8-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284496	PUMP-WATER	1	Breakdown Fig. Fig. 8-1z01 & 8-1z02
2		296284446	MOTOR - HYD 6.2 CID W/SPEED SENSOR	1	Breakdown Fig. Fig. 8-1z03
3		514014	1/2-13X1 1/2" SOCKET HEAD BOLT	2	
4		244068001	COUPLING -2" F NPT X 2" CAM L POLY	1	
5		224941001	CAP-2" CAM LOCK	1	
6		296296090	FITTING - 90 DEG - 12 MNPT X 12MJIC X 6FORB	1	
7		227235001	COUPLER-1/2"NPT QUICK(FEMALE)	1	
8		94973001	FITTING-8M JIC BLKHD X1/2M STR	1	
9		53871001	#10M O-RING X 12M JIC 90	1	
10		53826001	*#10M O-RING-#8M JIC ST.	1	(S/N 302-)
11		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
12		65562001	1/4M X 6M JIC ST.	1	
13		234679001	CAP-DUST	1	
14		296308017	FITTING - T 2"MNPT X 1 1/4" MNPT X 3/4" FNPT	1	
15		275770001	VALVE - 3/4 MXF BALL W/T-HNDL	2	
16		224939001	ELBOW-2" 45 DEGREE STREET(POLY)	1	
17		225839001	HOSE INSERT-3/4X3/4 MPT(POLY)	1	
18		646001	3/4 M X 3/4 FS 90 DEG EL	2	
19		1838001	CONNECTOR-WIRE (ETC)	2	
20		1830001	CABLE - 3/32" NYLON COATED - 11 1/2"	1	
21		296303696	*FITTING - 90 - 6MJ - 8FJX	1	(S/N 302-)

Water Pump Fig 8-1r01

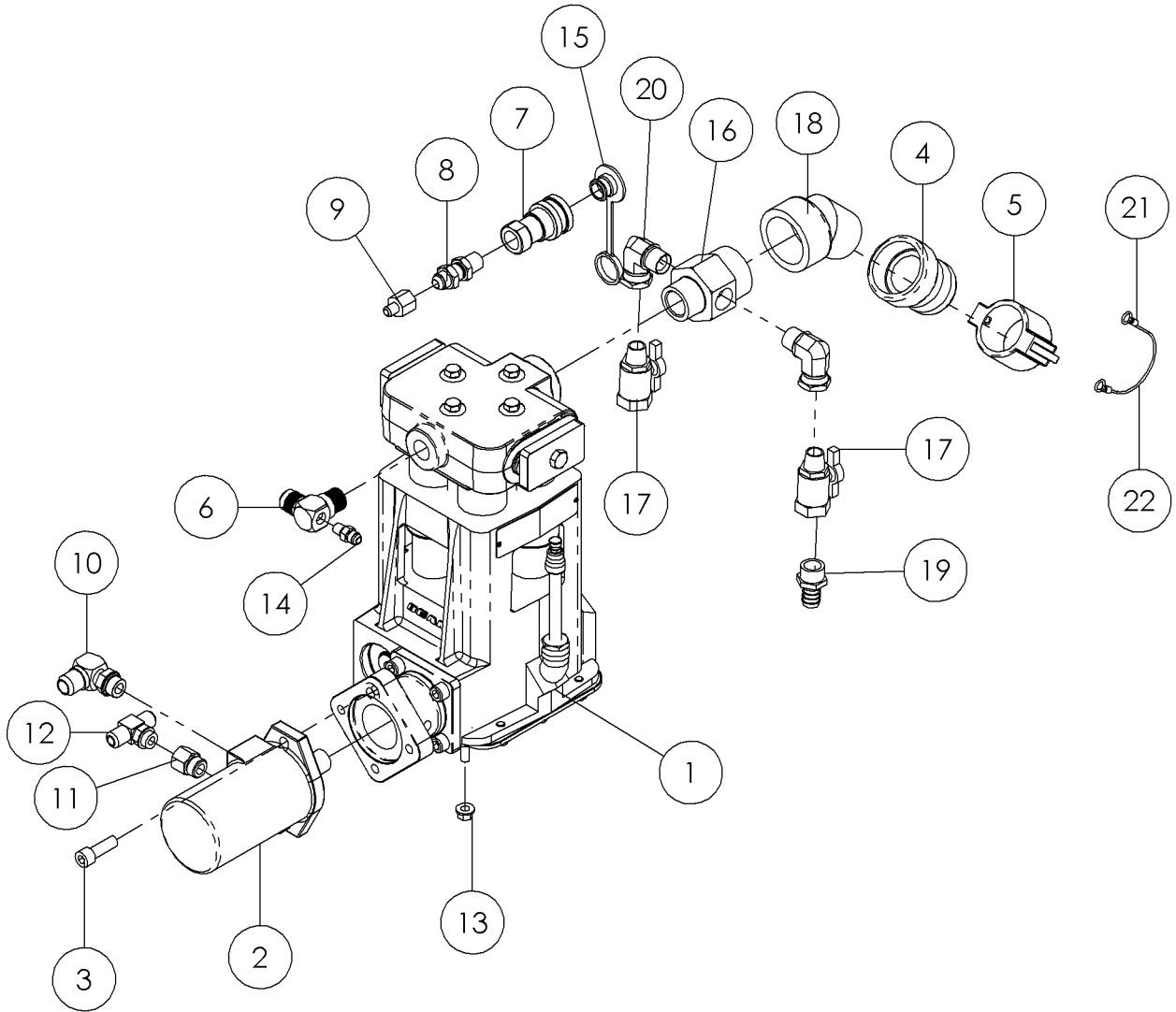


Illustration No. 296284487

## Water Pump Fig 8-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296284496	PUMP-WATER	1	Breakdown Fig. 8-1a & 8-1b
2		296284446	MOTOR - HYD 6.2 CID W/SPEED SENSOR	1	Breakdown Fig. 8-1c
3		514014	1/2-13X1 1/2" SOCKET HEAD BOLT	2	
4		244068001	COUPLING -2" F NPT X 2" CAM L POLY	1	
5		224941001	CAP-2" CAM LOCK	1	
6		296296090	FITTING - 90 DEG - 12 MNPT X 12MJIC X 6FORB	1	
7		227235001	COUPLER-1/2"NPT QUICK(FEMALE)	1	
8		94973001	FITTING-8M JIC BLKHD X1/2M STR	1	
9		61500001	8F JICX6M JIC ST REDUCER	1	
10		53871001	#10M O-RING X 12M JIC 90	1	
11		60930001	10MX8F ST.SOLID REDUCER	1	
12		202883001	8M BCH X 8M JIC X 8M JIC TEE	1	
13		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
14		65562001	1/4M X 6M JIC ST.	1	
15		234679001	CAP-DUST	1	
16		296308017	FITTING - T 2"MNPT X 1 1/4" MNPT X 3/4" FNPT	1	
17		275770001	VALVE - 3/4 MXF BALL W/T-HNDL	2	
18		224939001	ELBOW-2" 45 DEGREE STREET(POLY	1	
19		225839001	HOSE INSERT-3/4X3/4 MPT(POLY)	1	
20		646001	3/4 M X 3/4 FS 90 DEG EL	2	
21	*	1838001	CONNECTOR-WIRE (ETC)	2	
22	*	1830001	CABLE - 3/32" NYLON COATED - 11 1/2"	1	

Water Pump Fig 8-1

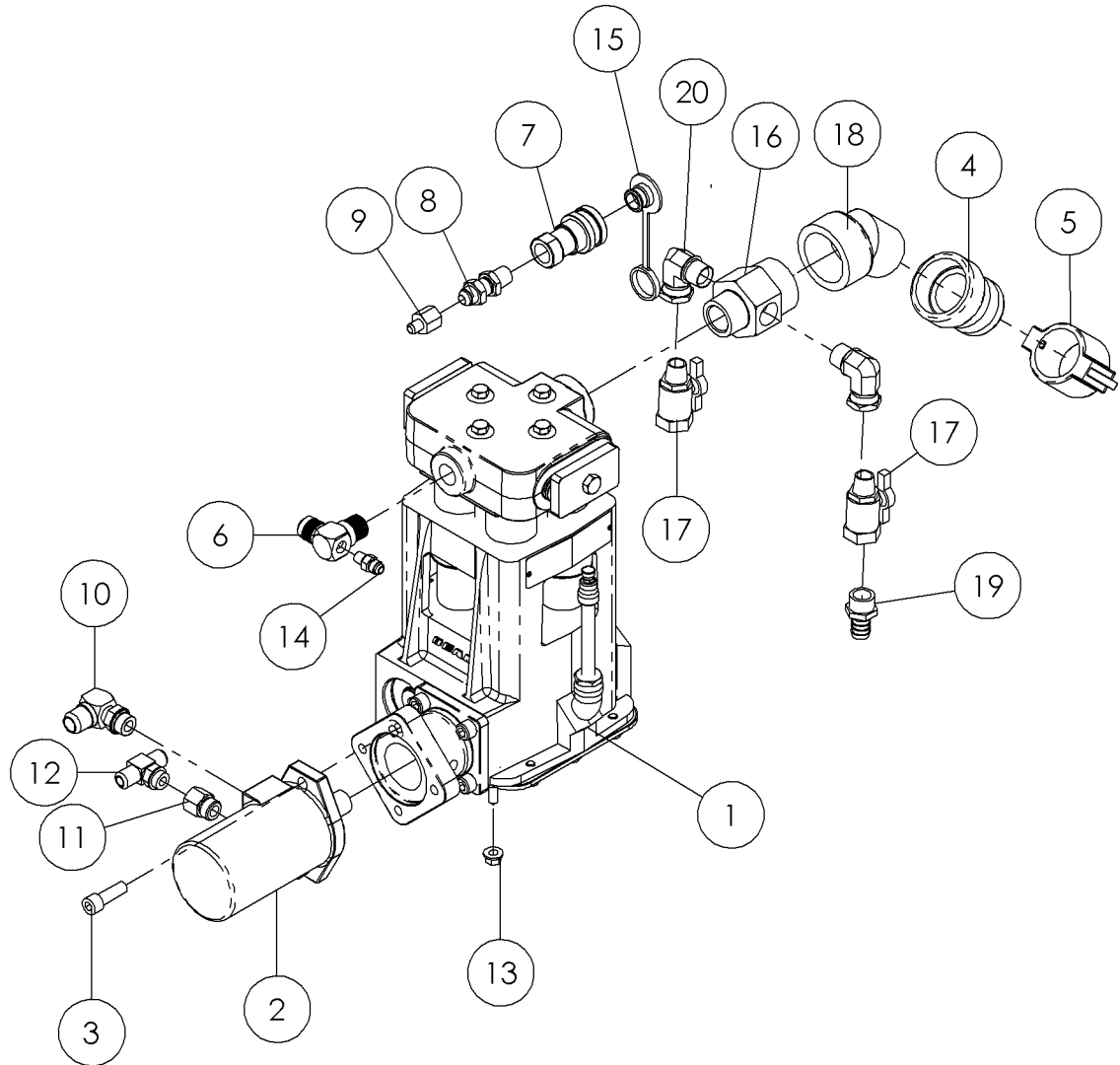


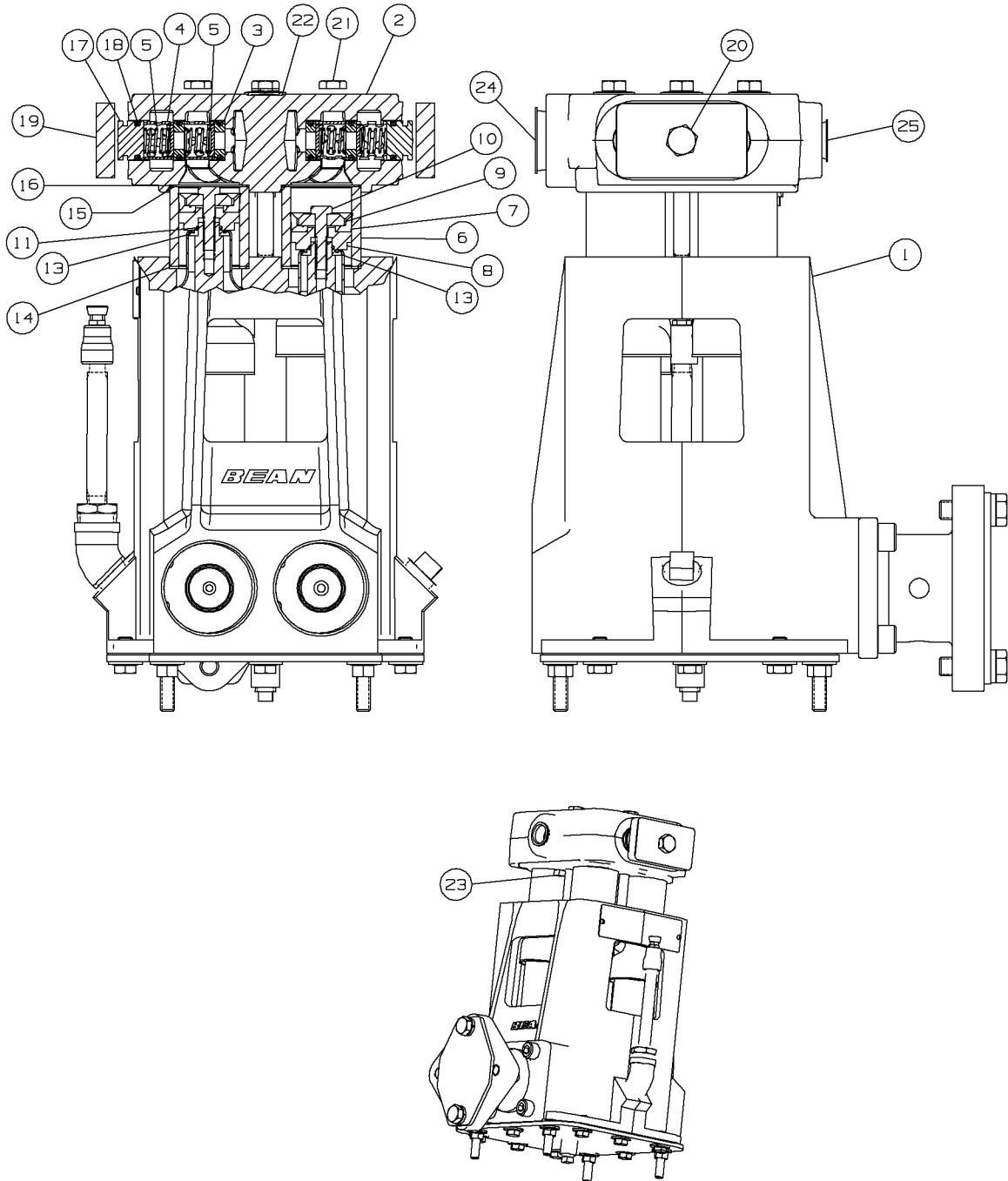
Illustration No. 296284487



## Water Pump Fig 8-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Update In Illustration.
1		296284496	PUMP-WATER	1	Breakdown Fig. 8-1a And 8-1b
2		296284446	MOTOR - HYD 6.2 CID W/SPEED SENSOR	1	Breakdown Fig. 8-1c
3		514014	1/2-13X1 1/2" SOCKET HEAD BOLT	2	
4		244068001	COUPLING -2" F NPT X 2" CAM L POLY	1	
5		224941001	CAP-2" CAM LOCK	1	
6		296296090	FITTING - 90 DEG - 12 MNPT X 12MJIC X 6FORB	1	
7		227235001	COUPLER-1/2"NPT QUICK(FEMALE)	1	
8		94973001	FITTING-8M JIC BLKHD X1/2M STR	1	
9		61500001	8F JICX6M JIC ST REDUCER	1	
10		53871001	#10M O-RING X 12M JIC 90	1	
11		60930001	10MX8F ST.SOLID REDUCER	1	
12		202883001	8M BCH X 8M JIC X 8M JIC TEE	1	
13		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
14		65562001	1/4M X 6M JIC ST.	1	
15		234679001	CAP-DUST	1	
16		296308017	FITTING - T 2"MNPT X 1 1/4" MNPT X 3/4" FNPT	1	
17		275770001	VALVE - 3/4 MXF BALL W/T-HNDL	2	
18		224939001	ELBOW-2" 45 DEGREE STREET(POLY	1	
19		225839001	HOSE INSERT-3/4X3/4 MPT(POLY)	1	
20		646001	3/4 M X 3/4 FS 90 DEG EL	2	

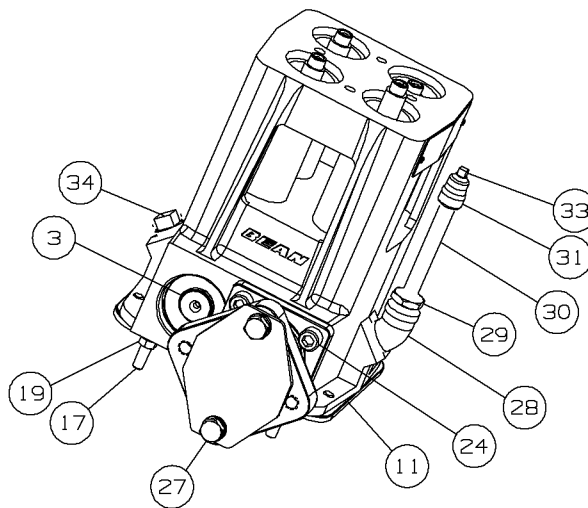
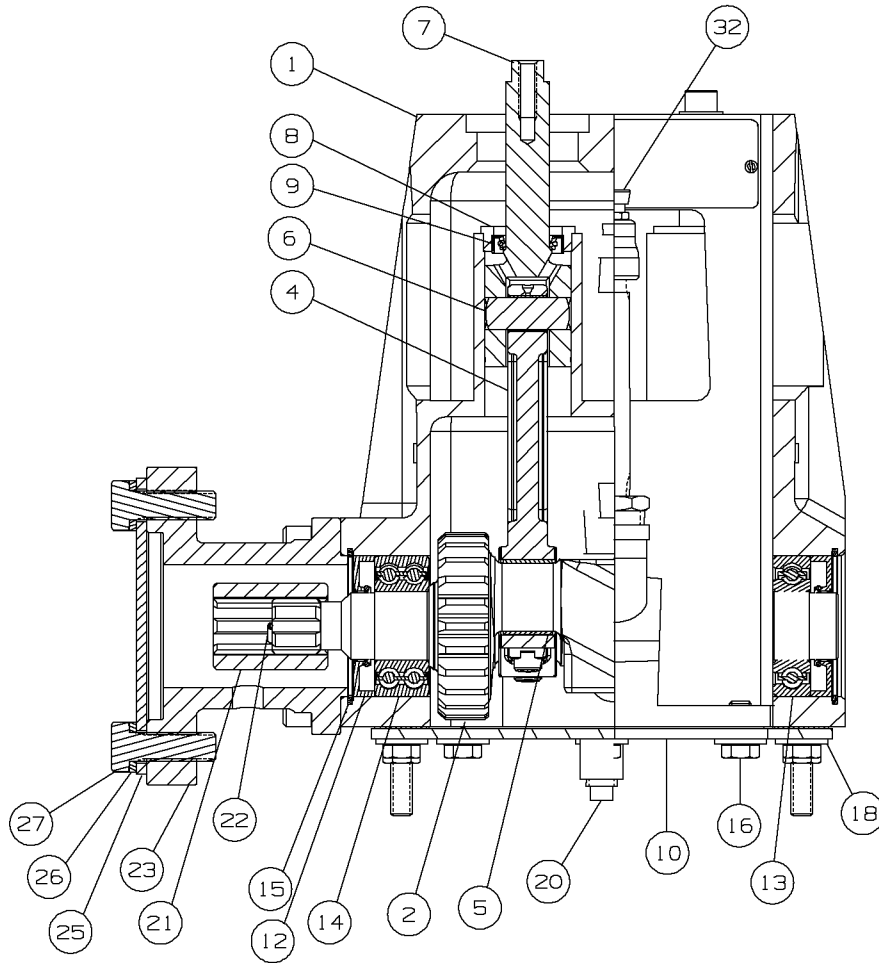
Components-Water Pump Fig 8-1z01



## Components-Water Pump Fig 8-1z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296302265	POWER END ASSY	1	
2		236318057	CYLINDER-FLUID	1	
3		218416013	SEAT-VALVE	8	
4		218416025	VALVE CAGE	8	
5		229367027	DISC AND SPRING ASSEMBLY	8	
6		224667003	CYLINDER 1 5/8	4	
7		224667007	PACKING 1 5/8 HSN	4	
8		224667005	PACKING HOLDER 1 5/8	4	
9		229367039	PACKING WASHER	4	
10		229367041	CAPSCREW-HEX HD 5/16-18X1 1/2	4	
11		218416043	O-RING-11/16 OD X9/16ID-1/16	4	
12		218416049	UMBRELLA	4	
13		218416047	WASHER-UMBRELLA	4	
14		296302266	GASKET-VALVE COVER	4	
15		218416035	SEAL RING 38-5	4	
16		218416033	O-RING-2 1/8"OD X 1/16	4	
17		218416011	VALVE COVER	4	
18		229367029	O-RING 1.1875 OD X .125	12	
19		218416007	CLAMP	2	
20		218416009	CAPSCREW-HEX HD 1/2-13 X 1 1/2	2	
21		296302267	CAP SCREW-HEX HEAD	4	
22		236318059	WASHER-7/16 BELLEVILLE	4	
23		236318049	PLUG-1/4" PIPE	1	
24		236318051	CAPLUG INT 1.75	1	
25		218416003	CAPLUG INT 12	1	

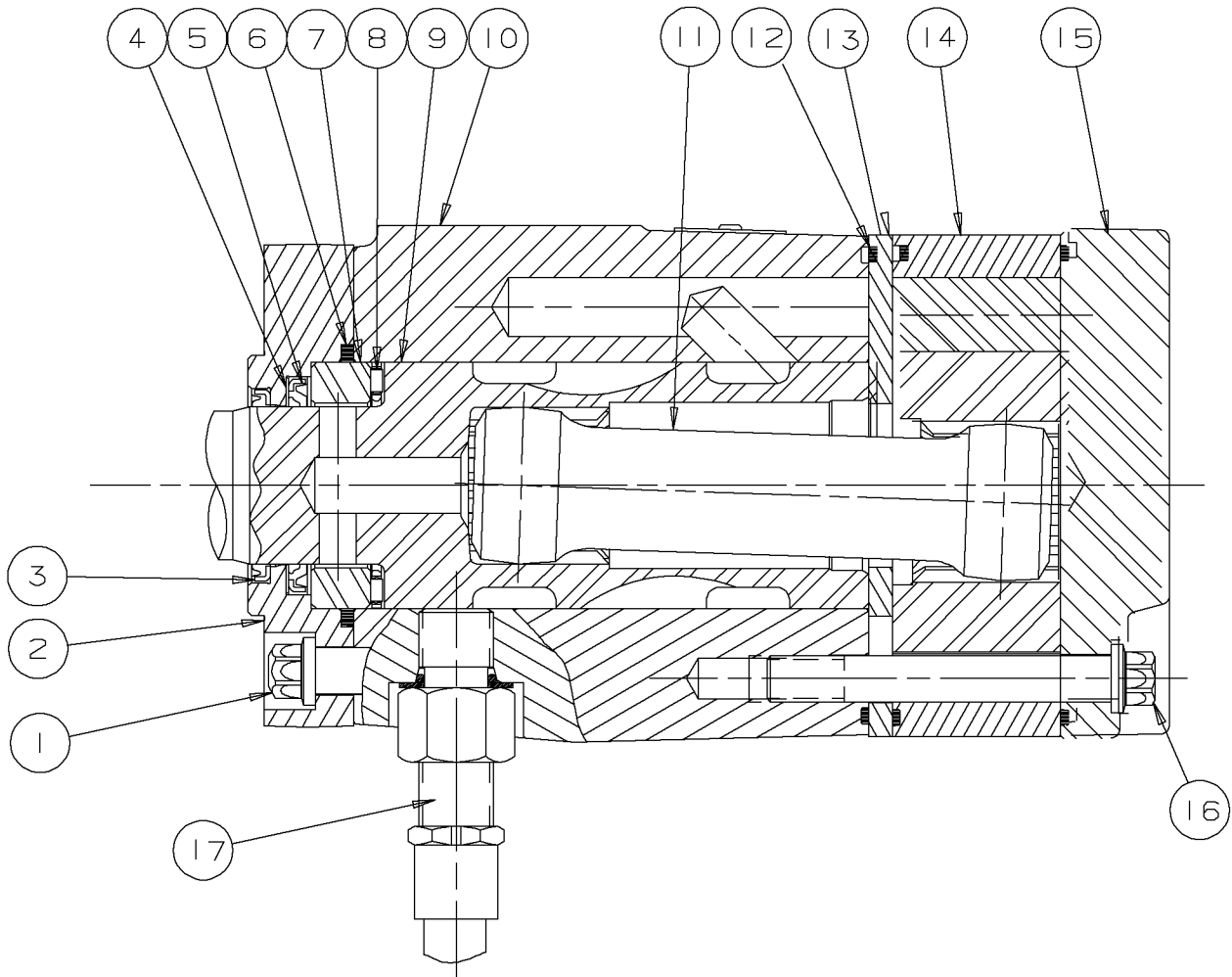
Components-Water Pump Fig 8-1z02



## Components-Water Pump Fig 8-1z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		236318003	POWER FRAME	1	
2		236318029	CRANKSHAFT-DRIVE	1	
3		236318048	CRANKSHAFT - DRIVEN	1	
4		236318042	CONNECTING ROD	4	
5		296272971	BEARING	8	
6		218416053	PIN-WRIST	4	
7		218416055	CROSSHEAD	4	
8		229367017	SEAL HOLDER	4	
9		904540035	OIL SEAL	4	
10		296302268	BACK COVER WELDMENT	1	
11		236318017	GASKET	1	
12		236318015	OIL SEAL	4	
13		236318007	BALL BEARING-SINGLE	3	
14		236318009	BALL BEARING DOUBLE	1	
15		236318019	RETAINER RING	4	
16		229367013	CAPSCREW-HEX HD 3/8-16 X 3/4	8	
17		296302269	STUD-3/8-16UNC	4	
18		904540041	WASHER-3/8 WAVE	12	
19		296302270	HEX NUT 3/8-16UNC	4	
20		236318013	PLUT-1/4" PIPE	1	
21		236318023	COUPLING	1	
22		296302271	PIN-SPRING SLOTTED	1	
23		236318027	FLANGE	1	
24		236318021	HEX SOC CAP SCREW 1/2-13 X 1	4	
25		236318041	COVER-FLANGE	1	
26		236318037	LOCKWASHER-1/2"	2	
27		236318035	HEX HD CAP SCREW 1/2-13 1 1/2	2	
28		228460011	3/4 NPT 45 DEGREE ST EL	1	
29		236318033	BUSHING-3/4 X 1/4 HEX	1	
30		236318039	NIPPLE-1/4NPT X 4 1/2	1	
31		229367025	REDUCER-1/4NPT X 1/8NPT	1	
32		904540031	BREATHER	1	
33		236318043	PLUG-1/4 NPT	1	
34		218416031	PIPE PLUG-3/4"SQ.HD.GALV.	1	

Components-Water Pump Motor Fig 8-1z03



## Components-Water Pump Motor Fig 8-1z03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		219177003	SCREW-CAP 5/16"-24 X 7/8	4	
2		236118003	FLANGE-2 BLT MOUNTING	1	
3		252340003	SEAL-EXCLUSION	1	
4		252340005	BACKUP WASHER	1	
5		252340007	SEAL-PRESSURE	1	
6		252340009	SEAL	1	
7		252340011	RACE-THRUST BEARING	1	
8		252340013	BEARING-THRUST NEEDLE	1	
9		287508007	SPEED SENSOR	1	
10		287508003	HOUSING	1	
11		219177009	DRIVE	1	
12		180009859	SEAL	3	
13		287508005	SPACER PLATE	1	
14		296302281	GEROLER SUB-ASSEMBLY	1	
15		180009861	END CAP	1	
16		219177007	SCREW	7	
17		251106009	SPEED PICKUP - ELECTRONIC	1	
		296284446	MOTOR - HYD 6.2 CID W/SPEED SENSOR		Inc. All Items In Figure.
		219177015	SEAL KIT		

Water Valve Fig 8-2r02

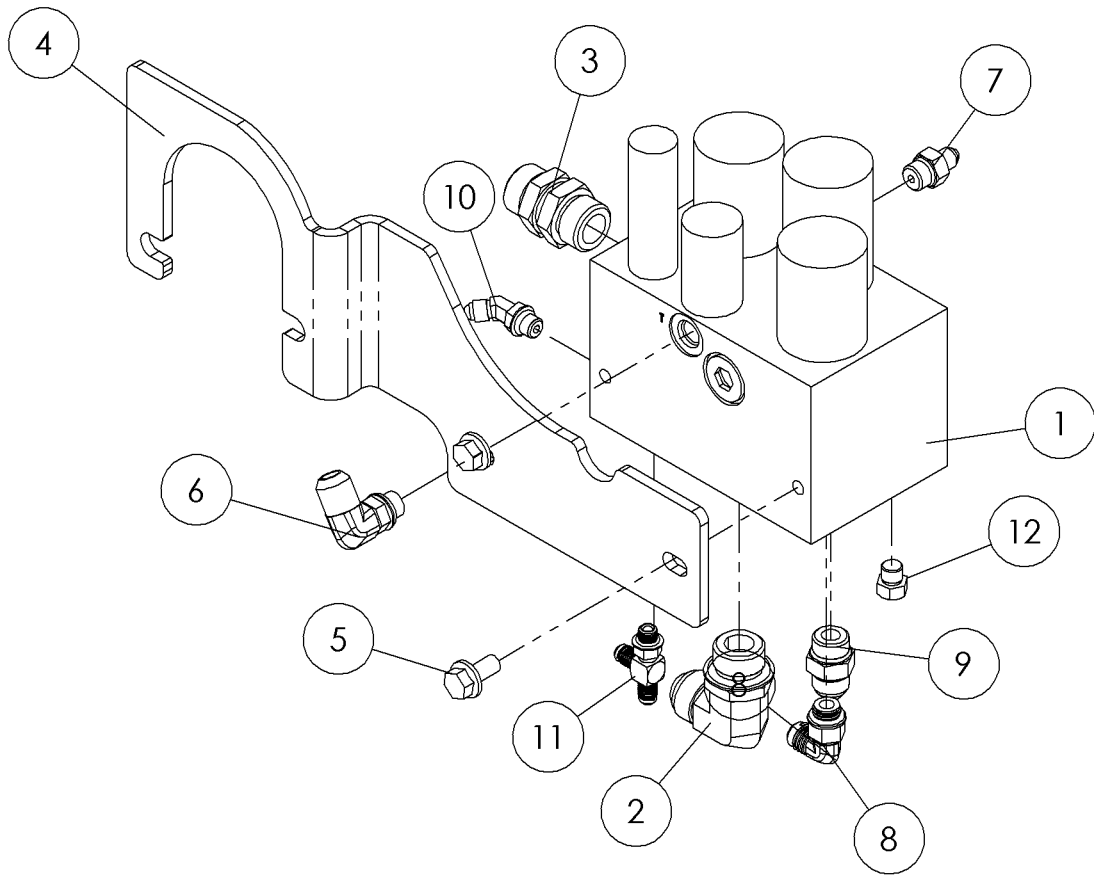


Illustration No. 296291821



## Water Valve Fig 8-2r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296291824	VALVE - DIVERTER/WATER	1	Breakdown Fig. 8-2a
2		59410001	FITTING-90-12MJ-12MORBA	1	
3		712001	12 M HEX NIPPLE	1	
4		296294141	PLATE - WATER/DRILL VALVE MOUNT	1	
5		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
6	*	77811001	FITTING - 6M O-RING X 8M JIC 90 DEG	1	
7		57968001	FITTING-STR-4MJ-6MORB	1	
8		59426001	FITTING - 90-6MJ-6MORBA	1	
9		53824001	FITTING-#8M O-RING-#8M JIC ST.	1	
10		58295001	FITTING-4M OR X 4M JIC 45 DEG.	1	
11		81342001	FITTING-RTEE-4MJ-4MORBA-4MJ	1	
12		67263001	FITTING - PLUG - 4MORB - HEX	1	

Water Valve Fig 8-2r01

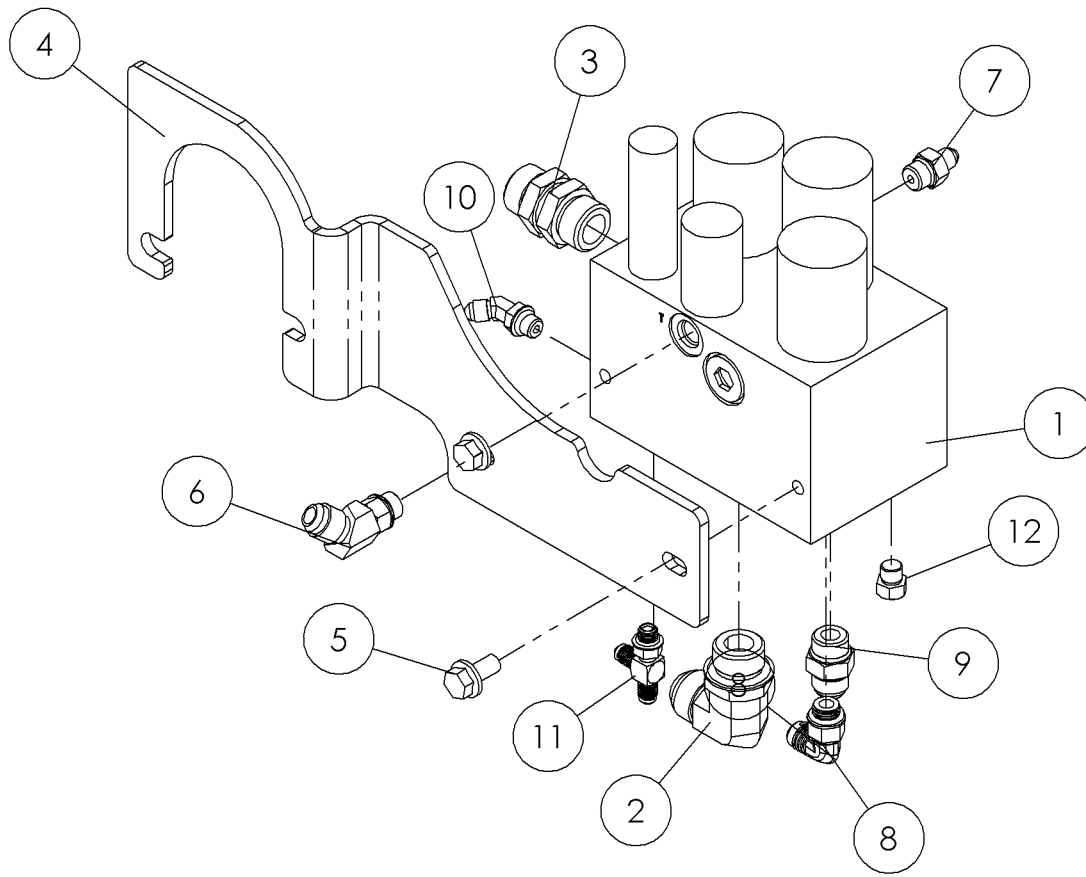


Illustration No. 296291821

## Water Valve Fig 8-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Add Plug
1		296291824	VALVE - DIVERTER/WATER	1	Breakdown Fig. 8-2a
2		59410001	FITTING-90-12MJ-12MORBA	1	
3		712001	12 M HEX NIPPLE	1	
4		296294141	PLATE - WATER/DRILL VALVE MOUNT	1	
5		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
6		102667001	FITTING-45-8MJIC-6MORBA	1	
7		57968001	FITTING-STR-4MJ-6MORB	1	
8		59426001	FITTING - 90-6MJ-6MORBA	1	
9		53824001	FITTING-#8M O-RING-#8M JIC ST.	1	
10		58295001	FITTING-4M OR X 4M JIC 45 DEG.	1	
11		81342001	FITTING-RTEE-4MJ-4MORBA-4MJ	1	
12	*	67263001	FITTING - PLUG - 4MORB - HEX	1	

Water Valve Fig 8-2

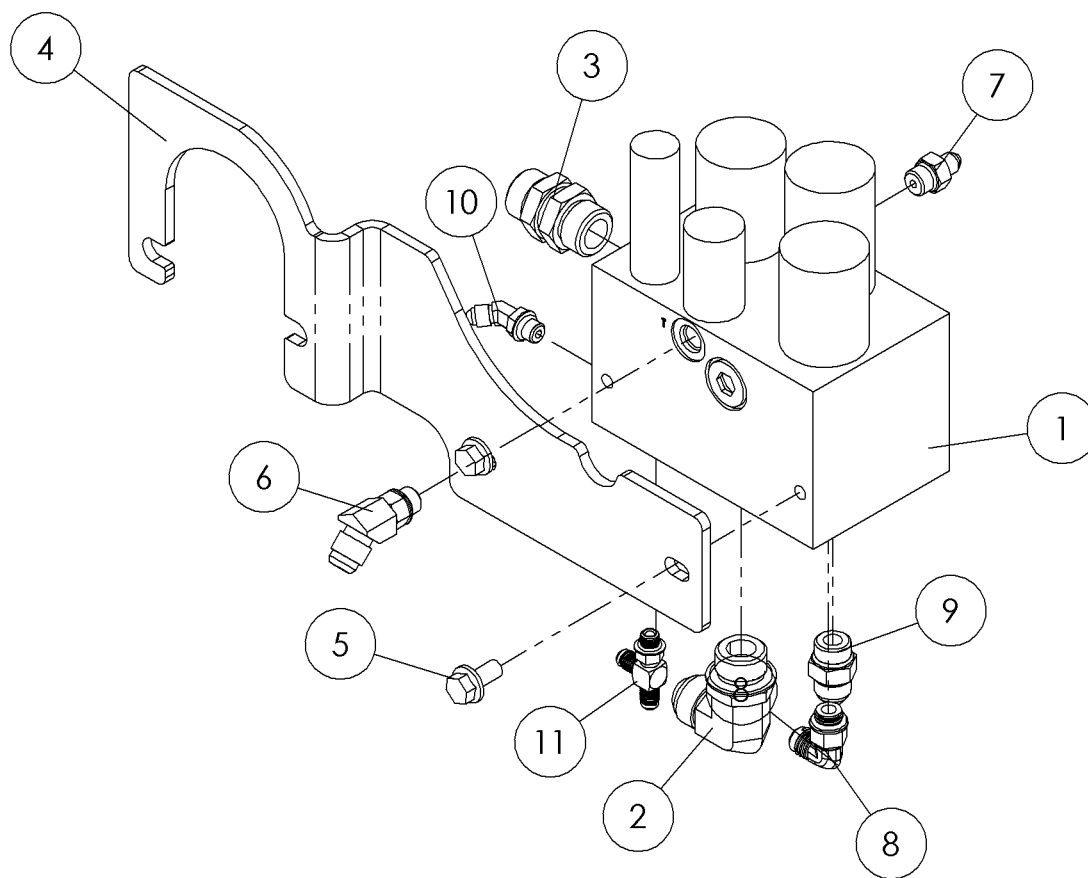
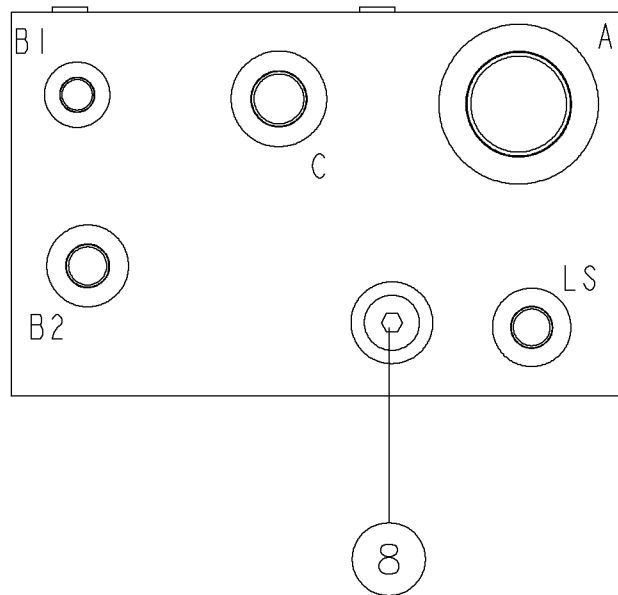
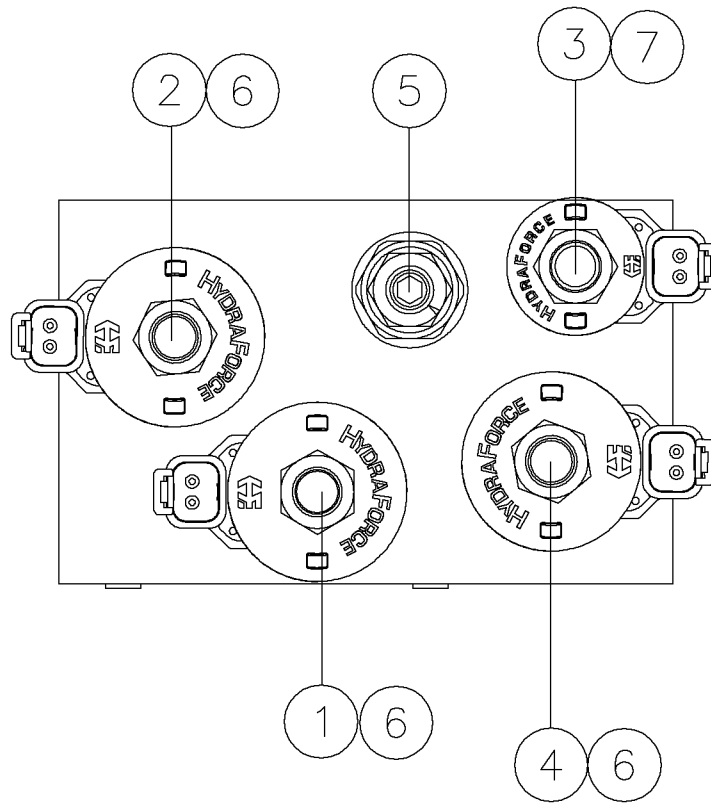


Illustration No. 296291821

## Water Valve Fig 8-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296291824	VALVE - DIVERTER/WATER	1	Breakdown Fig. 8-2a
2		59410001	FITTING-90-12MJ-12MORBA	1	
3		712001	12 M HEX NIPPLE	1	
4		296294141	PLATE - WATER/DRILL VALVE MOUNT	1	
5		296300771	SCREW-HFS-..38-16X.75GR8-YZ	2	
6		102667001	FITTING-45-8MJIC-6MORBA	1	
7		57968001	FITTING-STR-4MJ-6MORB	1	
8		59426001	FITTING - 90-6MJ-6MORBA	1	
9		53824001	FITTING-#8M O-RING-#8M JIC ST.	1	
10		58295001	FITTING-4M OR X 4M JIC 45 DEG.	1	
11		81342001	FITTING-RTEE-4MJ-4MORBA-4MJ	1	

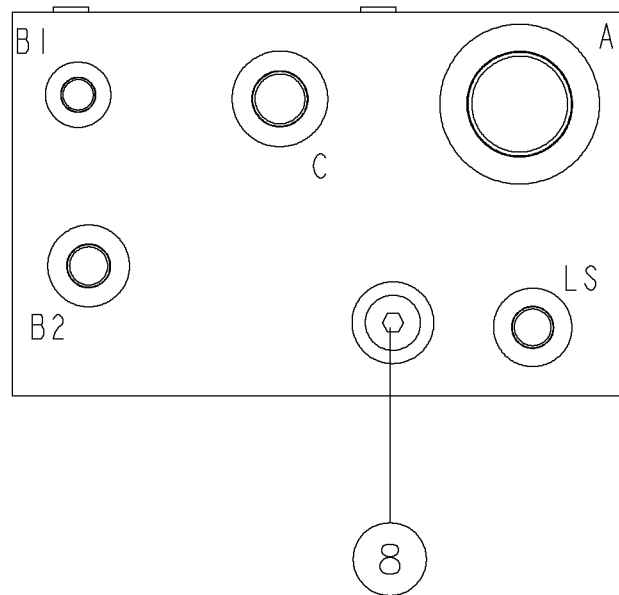
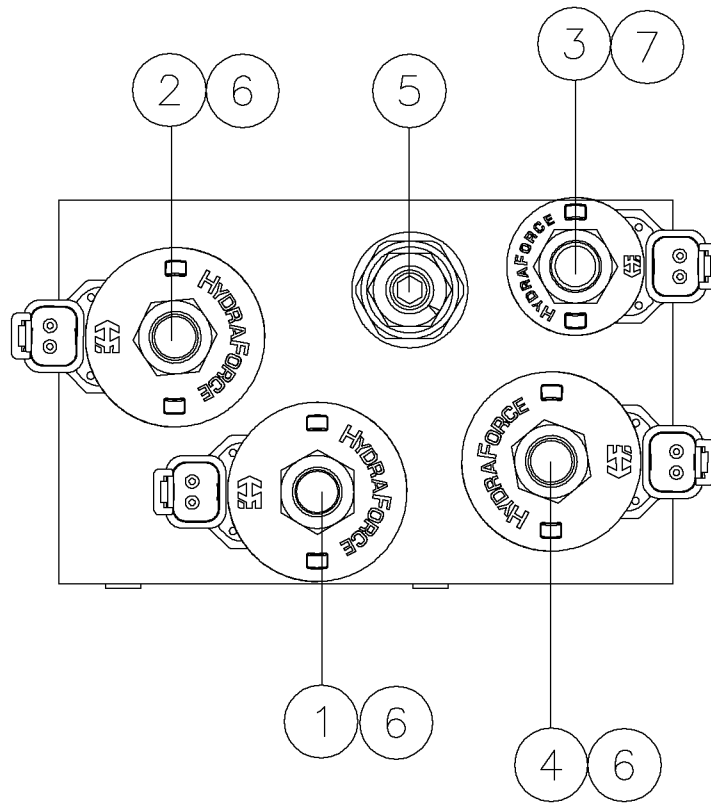
Components-Water Valve (S/N 291-) Fig 8-2z01r01



## Components-Water Valve (S/N 291-) Fig 8-2z01r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		279359004	POPPET - 2-WAY NORMALLY OPEN	1	
2		296272890	CARTRIDGE (NO COIL)	1	
3		296272936	SOLENOID VALVE	1	
4		296302264	*CARTRIDGE VALVE	1	
5		296303968	PRESSURE RELIEF VALVE - 1365 PSI	1	(S/N 291-)
5		296302273	SEAL KIT	1	
6		296265644	COIL	3	
7		296271115	COIL	1	
8		296272884	CHECK VALVE	1	
		296291824	VALVE - DIVERTER/WATER		Inc. All Items In Figure.

Components-Water Valve (S/N 101-290) Fig 8-2z01



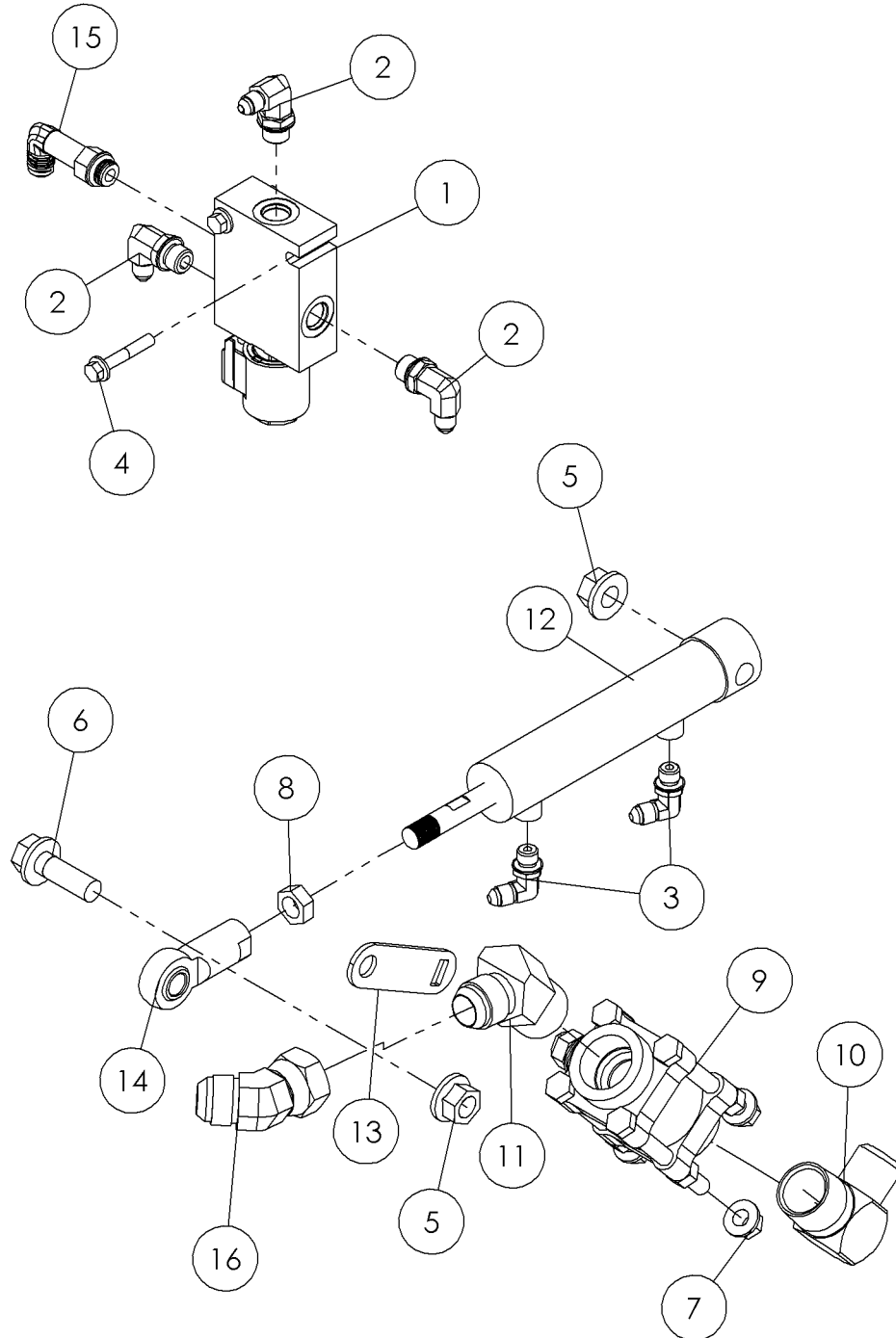


Components-Water Valve (S/N 101-290) Fig 8-2z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		279359004	POPPET - 2-WAY NORMALLY OPEN	1	
2		296272890	CARTRIDGE (NO COIL)	1	
3		296272936	SOLENOID VALVE	1	
4		296302265	CARTRIDGE VALVE	1	
5		296303968	*PRESSURE RELIEF VALVE - 1365 PSI	1	
5		296302273	SEAL KIT	1	
6		296265644	COIL	3	
7		296271115	COIL	1	
8		296272884	CHECK VALVE	1	
		296291824	VALVE - DIVERTER/WATER		Inc. All Items In Figure.

Water Shut-Off (S/N 302-) Fig 8-3r01

Illustration No. 296284495



## Water Shut-Off (S/N 302-) Fig 8-3r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		294901001	VALVE - GREASER	1	Breakdown Fig. 8-3z01
2		57950001	FITTING - 90-6MORBA-4MJ	3	
3		59423001	90-4MORBA-4MJ	2	
4		296300756	SCREW-HFS-.25-20X1.50-GR8-YZ	2	
5		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
6		296300790	SCREW-HFS-.50-13X1.50-GR8-YZ	1	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
8		3888001	NUT-1/2 N.F. HEX JAM	1	
9		278003001	VALVE - 1" 1500 PSI BRASS BALL	1	
10		70010001	FITTING-1MNPTX12MJIC 90 DEG.	1	
11		100849001	FITTING-1MNPTX12MJIC 45 DEG.	1	
12		296285658	CYLINDER 1 X 3-1/2	1	Breakdown Fig. 8-3z02
13		296296096	ARM - LEVER	1	
14		224291001	BALL JOINT-1/2-20 FEMALE THDS.	1	Breakdown Fig. 8-3z03
15		157172001	FITTING - 6M X 6M JIC LL 90 DEG	1	
16		58017001	*45-12FSJ-12MJ	1	(S/N 302-)

Water Shut-Off (S/N 101-301) Fig 8-3

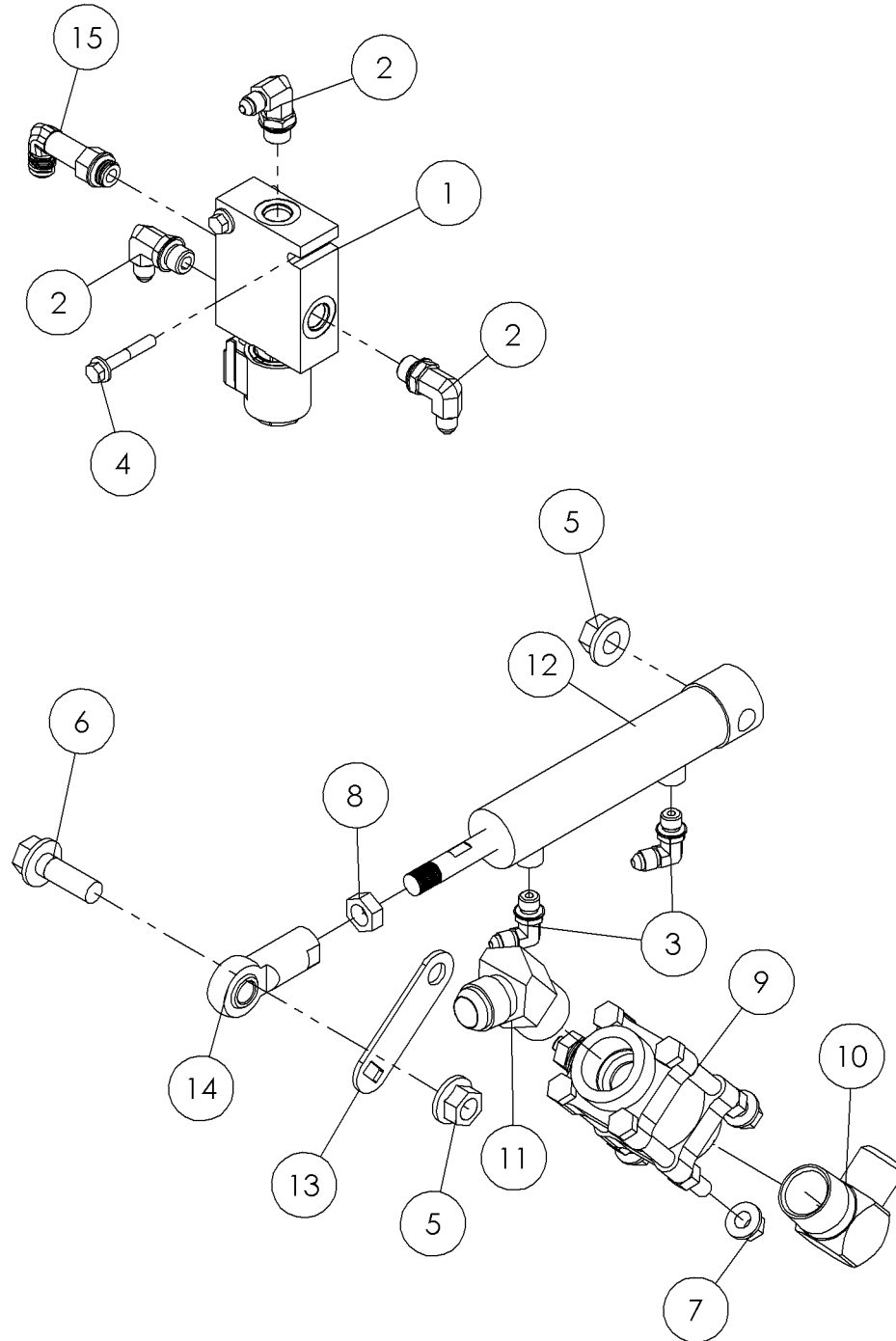
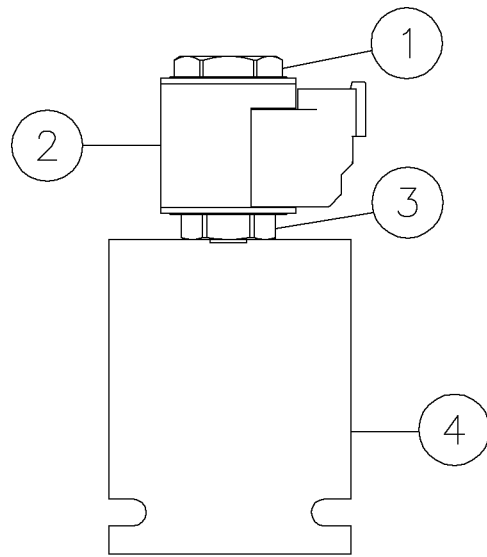


Illustration No. 296284495

## Water Shut-Off (S/N 101-301) Fig 8-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Update In Illustration.
1		294901001	VALVE - GREASER	1	Breakdown Fig. 8-3a
2		57950001	FITTING-90-4MJ-6MORBA	3	
3		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	2	
4		296300756	SCREW-HFS-.25-20X1.50-GR8-YZ	2	
5		296300851	NUT-HEXFLGTL-.50-13-G-YZ	2	
6		296300790	SCREW-HFS-.50-13X1.50-GR8-YZ	1	
7		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
8		3888001	NUT-1/2 N.F. HEX JAM	1	
9		278003001	VALVE - 1" 1500 PSI BRASS BALL	1	
10		70010001	FITTING-1MNPTX12MJIC 90 DEG.	1	
11		100849001	FITTING-1MNPTX12MJIC 45 DEG.	1	
12		296285658	CYLINDER 1 X 3-1/2	1	Breakdown Fig. 8-3b
13		296296096	ARM - LEVER	1	
14		224291001	BALL JOINT-1/2-20 FEMALE THDS.	1	Breakdown Fig. 8-3c
15		157172001	FITTING - 6M X 6M JIC LL 90 DEG	1	

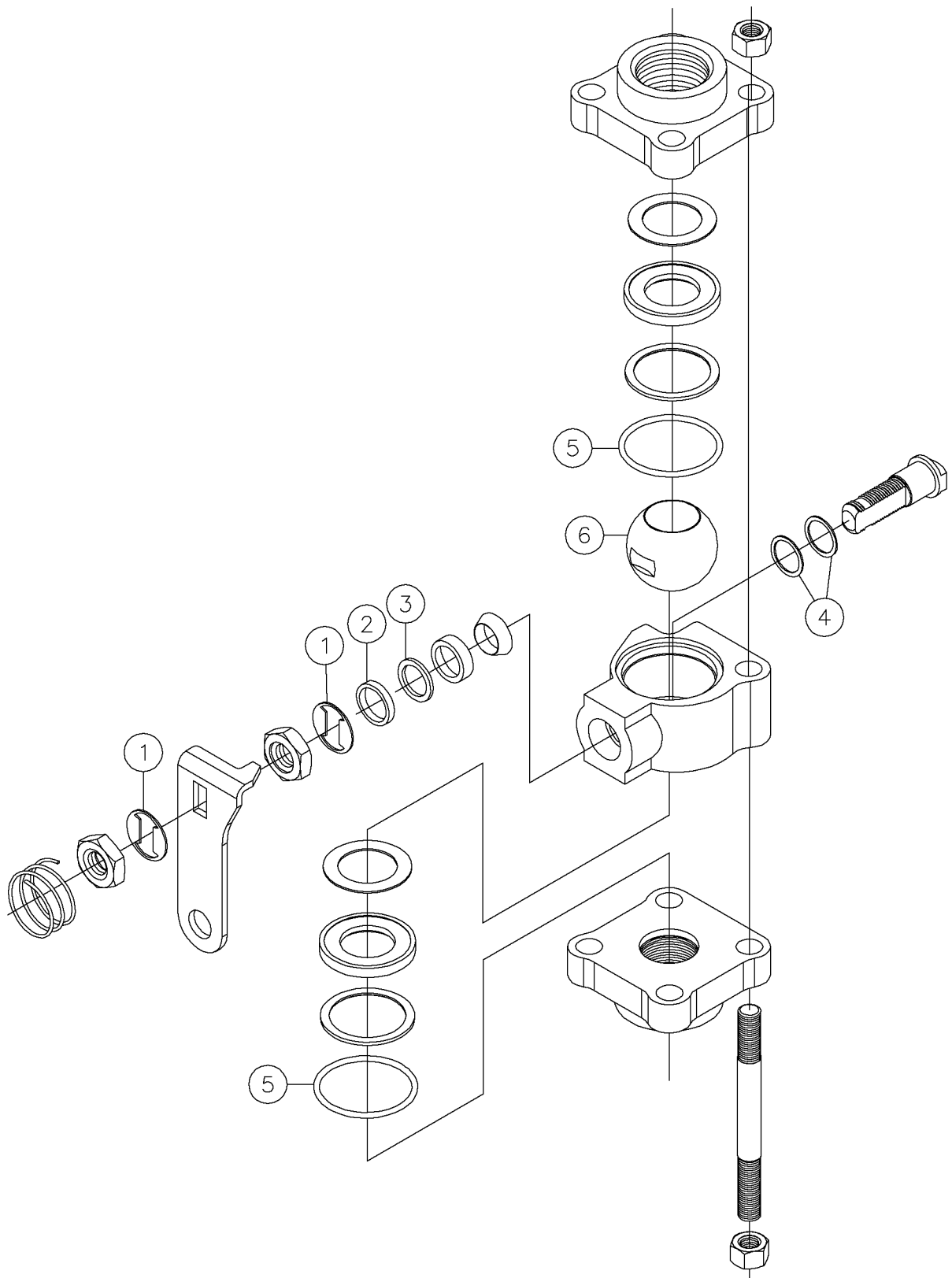
Components-Valve Fig 8-3z01



## Components-Valve Fig 8-3z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296265526	NUT-COIL	1	
2		296265527	COIL	1	
3		244725009	CARTRIDGE - SOLENOID	1	
		244725011	SEAL KIT	1	
4		NSS	BLOCK	1	Not Sold Separately
		294901001	VALVE - GREASER	1	Inc All Items In Figure.

Components-Shut-Off Valve Fig 8-3z02

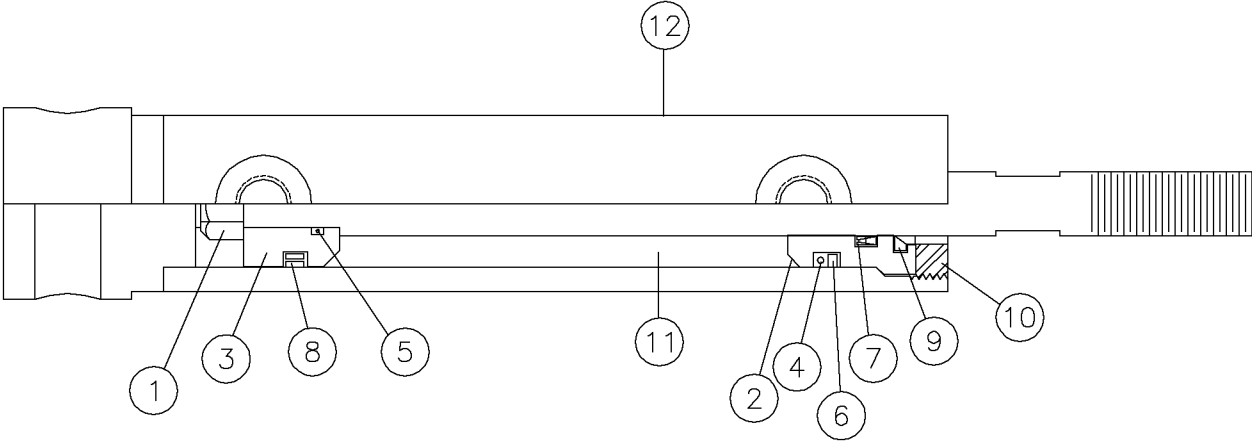




## Components-Shut-Off Valve Fig 8-3z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	STEM SPRING	2	Not Sold Separately
2		NSS	GLAND	1	Not Sold Separately
3		NSS	PACKING SUPPORT	1	Not Sold Separately
4		NSS	BEARING - STEM	2	Not Sold Separately
5		NSS	O-RING	2	Not Sold Separately
6		245079025	BALL	1	
		278003001	VALVE - 1" 1500 PSI BRASS BALL		Inc All Items In Figure.
		245079039	KIT-MAINTENANCE		Inc. Ref 1-5

Components-Cylinder Fig 8-3z03



## Components-Cylinder Fig 8-3z03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	NUT	1	Not Sold Separately
2		NSS	HEAD	1	Not Sold Separately
3		NSS	PISTON	1	Not Sold Separately
4		NSS	O-RING	1	Not Sold Separately
5		NSS	O-RING	1	Not Sold Separately
6		NSS	BACKUP	3	Not Sold Separately
7		NSS	BS SEAL	1	Not Sold Separately
8		NSS	PSP SEAL	1	Not Sold Separately
9		NSS	DUST SEAL	1	Not Sold Separately
10		NSS	COLLAR	1	Not Sold Separately
11		296285210	SHAFT	1	
12		NSS	BARREL W/CLEVIS AND PORTS	1	Not Sold Separately
		296285658	CYLINDER 1 X 3-1/2		Inc. All Items In Figure.
		296285211	SEAL KIT		Inc. Ref. 4 Thru 9

Antifreeze Tank Fig 8-4r01

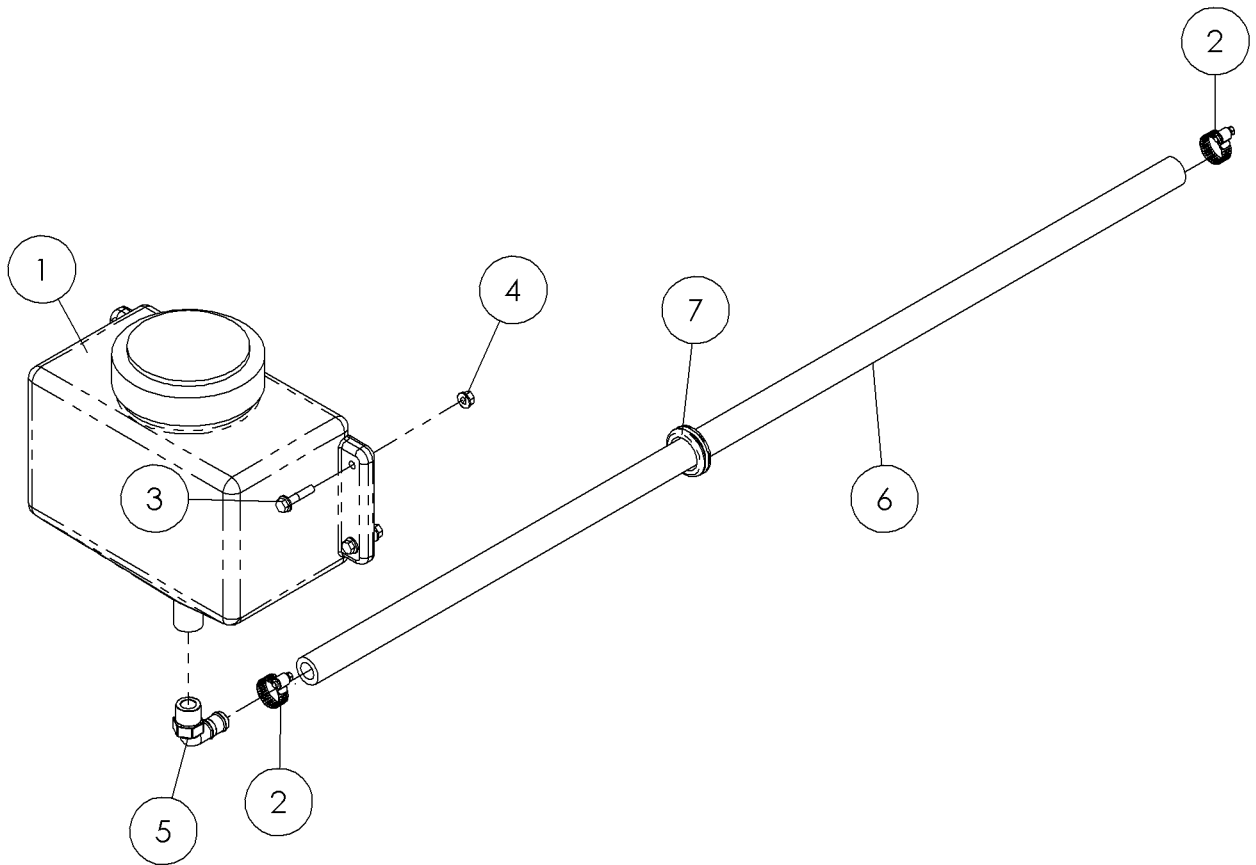


Illustration No. 296291767

## Antifreeze Tank Fig 8-4r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Update In Illustration & Parts List.
1		296293950	TANK-2.5 GAL. W/LID	1	Inc. Tank And Lid
2		1580005	HOSE CLAMP - 1"	2	
3		296300765	SCREW-FS-.31-18X1.50-GR8-YZ	4	
4		296300849	NUT-HEXFLGTL-.31-18-G-YZ	4	
5		225845001	HOSE INSERT-3/4X3/4 MPT 90POLY	1	
6		296308021	HOSE ANTI FREEZE 3/4" ID	1	
7		902402001	GROMMET-1 1/2" RUBBER	1	

Antifreeze Tank Fig 8-4

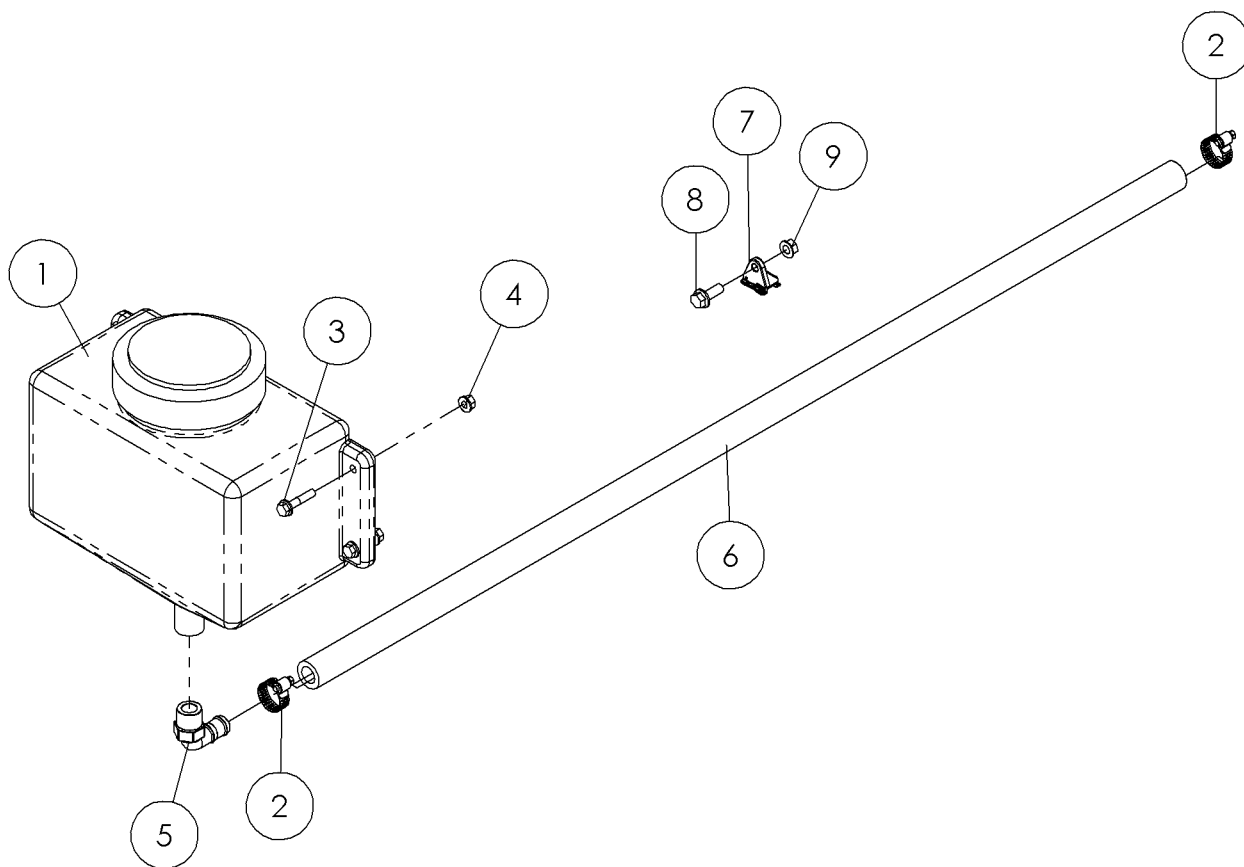
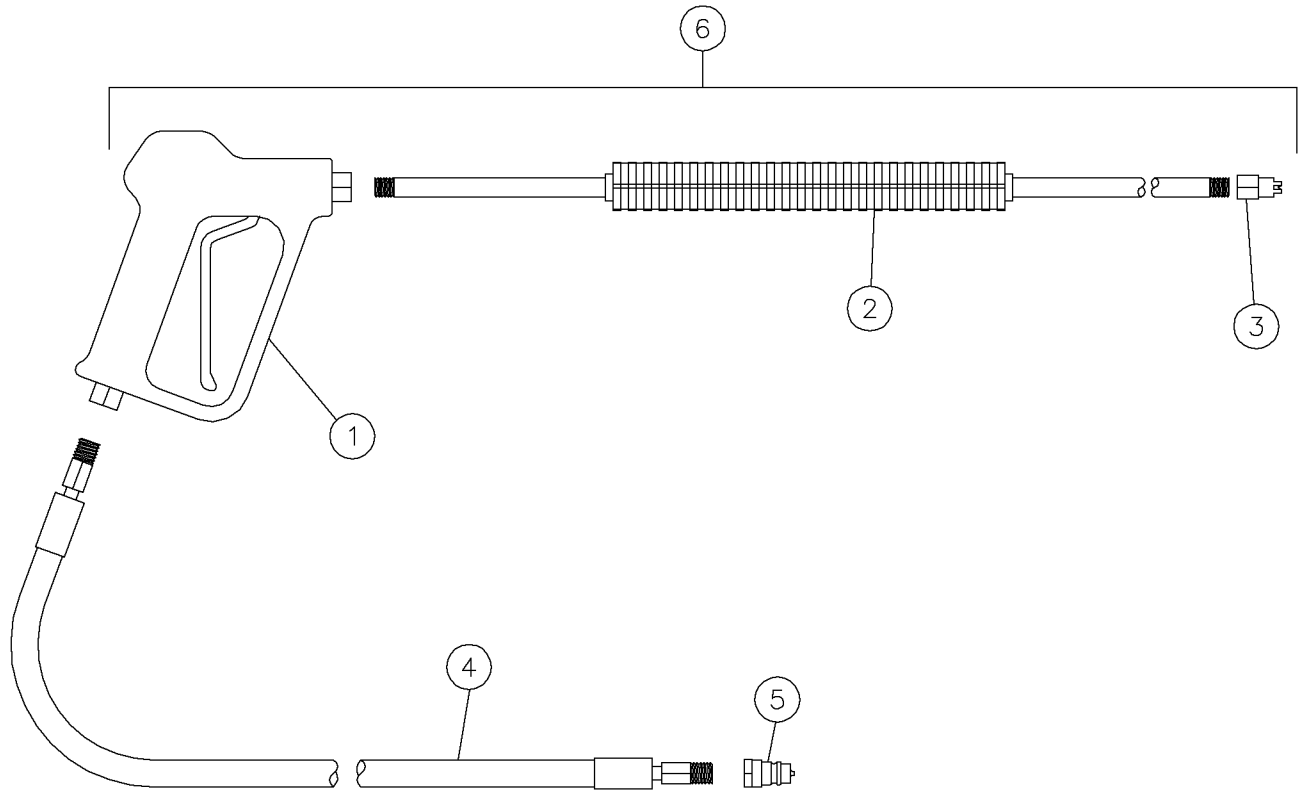


Illustration No. 296291767

## Antifreeze Tank Fig 8-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296293950	TANK-2.5 GAL. W/LID	1	Inc. Tank And Lid.
2		1580005	HOSE CLAMP - 1"	2	
3		296300765	SCREW-FS-.31-18X1.50-GR8-YZ	4	
4		296300849	NUT-HEXFLGTL-.31-18-G-YZ	4	
5		225845001	HOSE INSERT-3/4X3/4 MPT 90POLY	1	
6		296308021	HOSE ANTI FREEZE 3/4" ID	1	
7		510508213	AXIAL MOUNT (CONCENTRIC)	1	
8		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	1	
9		296300895	NUT-HEXFLG-.38-16-GR8-YZ	1	

Wand Fig 8-5

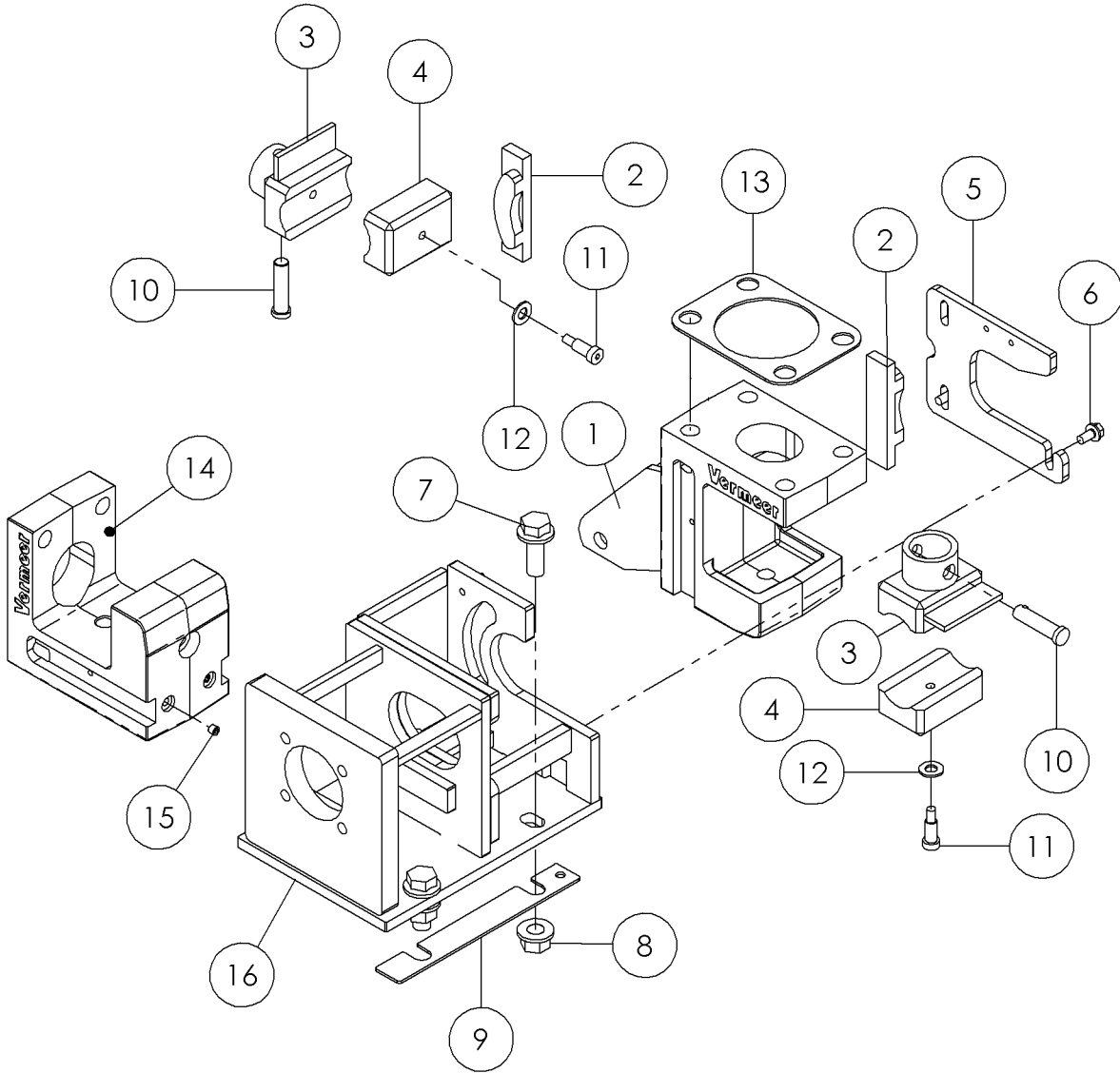




Wand Fig 8-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		904578001	GUN HANDLE	1	
2		904577001	MOLDED LANCE	1	
3		904576001	SPRAY NOZZLE	1	
4		282761001	HOSE-3/8X500 3/8MSNPT/1/2MNPT 100R2	1	
5		227236001	COUPLER-1/2" NPT QUICK(MALE)	1	
6		285927001	GUN ASSY	1	
		240264001	WAND ASSY	1	Inc. All Items in Figure.

Vise Clamp (S/N 137-) Fig 9-1r01



## Vise Clamp (S/N 137-) Fig 9-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296281207	PLATE - CLAMP	1	
2		232449001	PIVOT-SLIDE	2	
3		296279704	JAW - 2.06 STEM	2	
4		296279701	JAW - 2.06 STEM	2	
5		296291813	PLATE - ROD CENTERING	1	
6		296300771	SCREW-HFS-..38-16X.75GR8-YZ	3	
7		296300817	SCREW-HFS-.75-10X2.00-GR8-YZ	4	
8		296300853	NUT-HEXFLGTL-.75-10-G-YZ	4	
9		236110001	PLATE-CLAMP SHIM	2	
10		240032001	PIN-.620X2 33/64 BALL LOCK	2	
11		129671001	SCREW-1/2X1 SOCKET SHOULDER	2	
12		485025	WASHER-1/2 FLAT-HARDENED-YZ	2	
13		296282029	PLATE - SHIM	1	
14		296272131	BAR - CLAMP MACHINED	1	
15		115222001	FITTING-1/8 NPT HEX SOCKET	4	
16	*	296308039	WELDMENT - EXTENDED VISE CLAMP FRAME	1	(SN 137- )

Vise Clamp (S/N 101-136) Fig 9-1

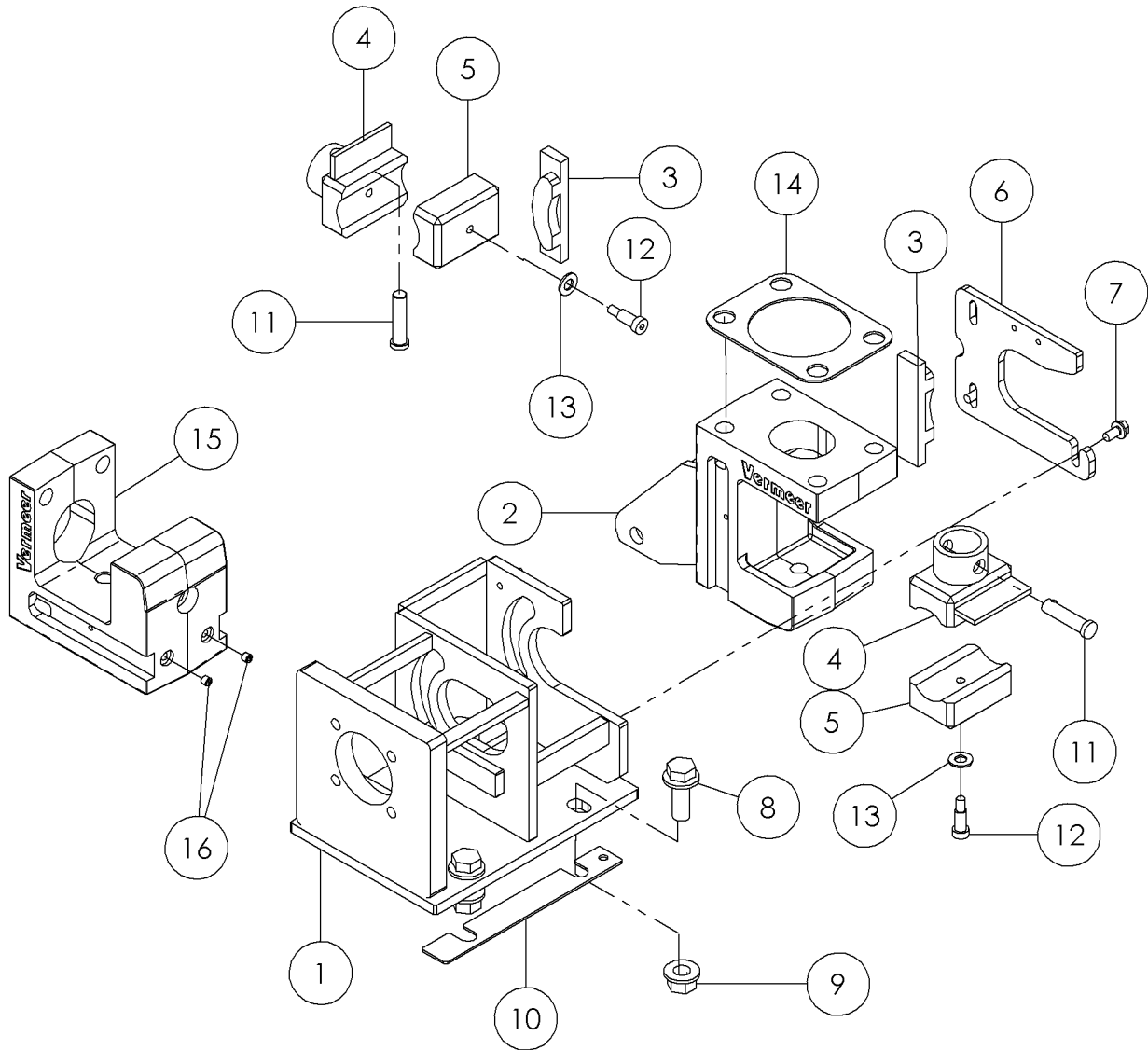


Illustration No. 296284428

## Vise Clamp (S/N 101-136) Fig 9-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296284396	WISE CLAMP FRAME WELDMENT	1	
2		296281207	PLATE - CLAMP	1	
3		232449001	PIVOT-SLIDE	2	
4		296279704	JAW - 2.06 STEM	2	
5		296279701	JAW - 2.06 STEM	2	
6		296291813	PLATE - ROD CENTERING	1	
7		296300771	SCREW-HFS-..38-16X.75GR8-YZ	3	
8		296300817	SCREW-HFS-.75-10X2.00-GR8-YZ	4	
9		296300853	NUT-HEXFLGTL-.75-10-G-YZ	4	
10		236110001	PLATE-CLAMP SHIM	2	
11		240032001	PIN-.620X2 33/64 BALL LOCK	2	
12		129671001	SCREW-1/2X1 SOCKET SHOULDER	2	
13		485025	WASHER-1/2 FLAT-HARDENED-YZ	2	
14		296282029	PLATE - SHIM	1	
15	*	296272131	BAR - CLAMP MACHINED	1	
16	*	115222001	FITTING-1/8 NPT HEX SOCKET	4	

Vise Valve Fig 9-2

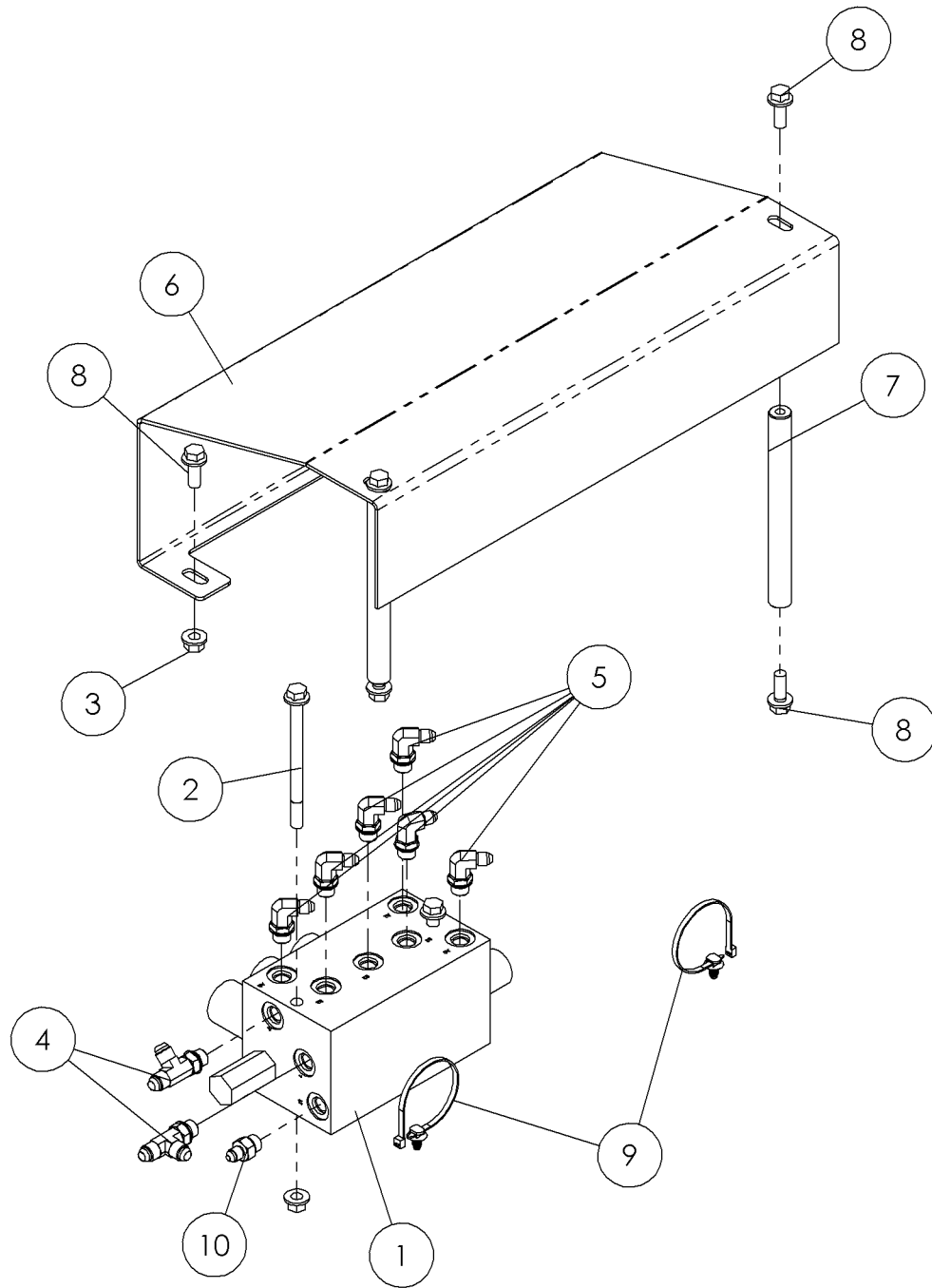
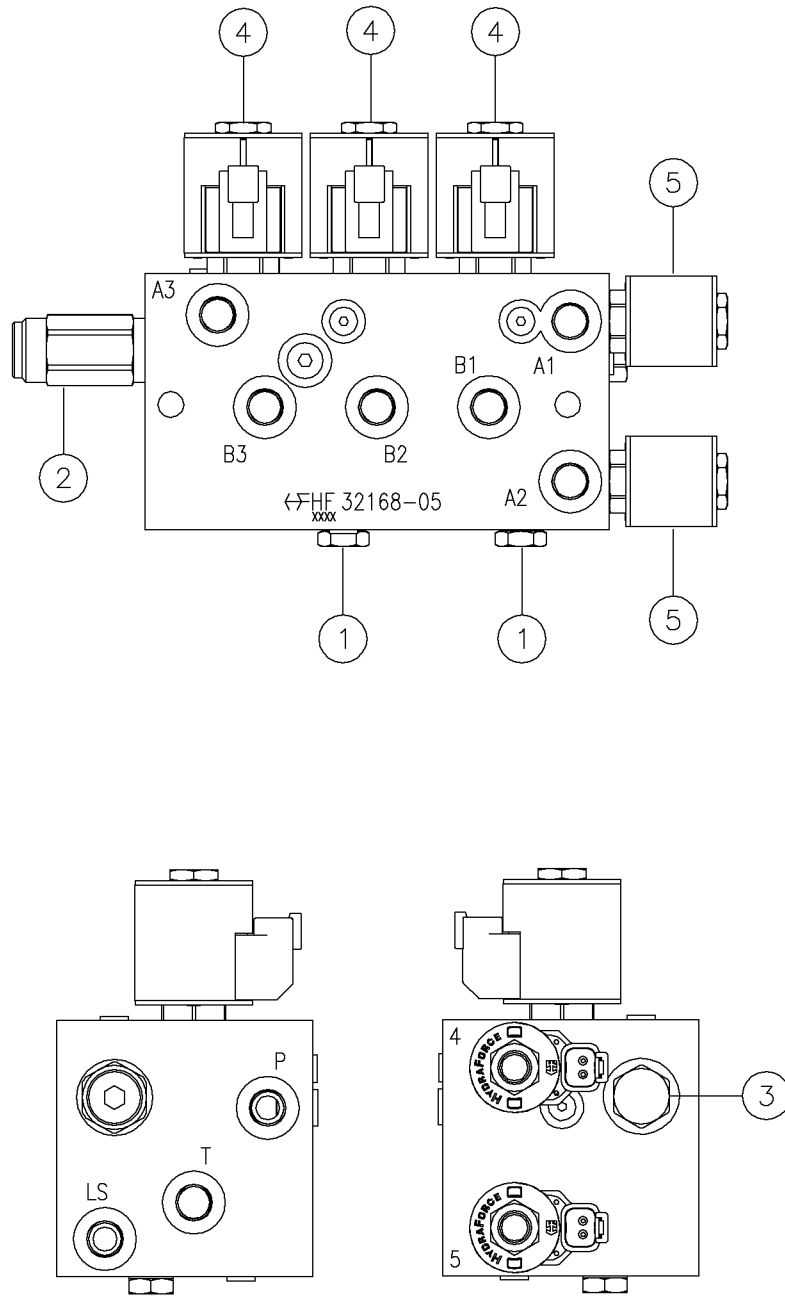


Illustration No. 296291789

## Vise Valve Fig 9-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	July, 2008		Change Quantity
1		296266538	VALVE - VISE CONTROL	1	Breakdown Fig. 9-2a
2		296300917	SCREW-HFS-.38-16X5.00-GR8-YZ	2	
3		296300850	NUT-HEXFLGTL-.38-16-G-YZ	4	
4		68774001	FITTING-6MX6M JIC (RUN)X6M JIC	2	
5		57950001	FITTING-90-4MJ-6MORBA	6	
6		296291791	SHIELD - RACK VALVE	1	
7		296282063	SPACER - HOSE TRACK FRAME	2	
8		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	6	
9	*	296276007	FIR TREE MOUNT	2	
10		57968001	FITTING-STR-4MJ-6MORB	1	

Components-Vise Valve Fig 9-2z01



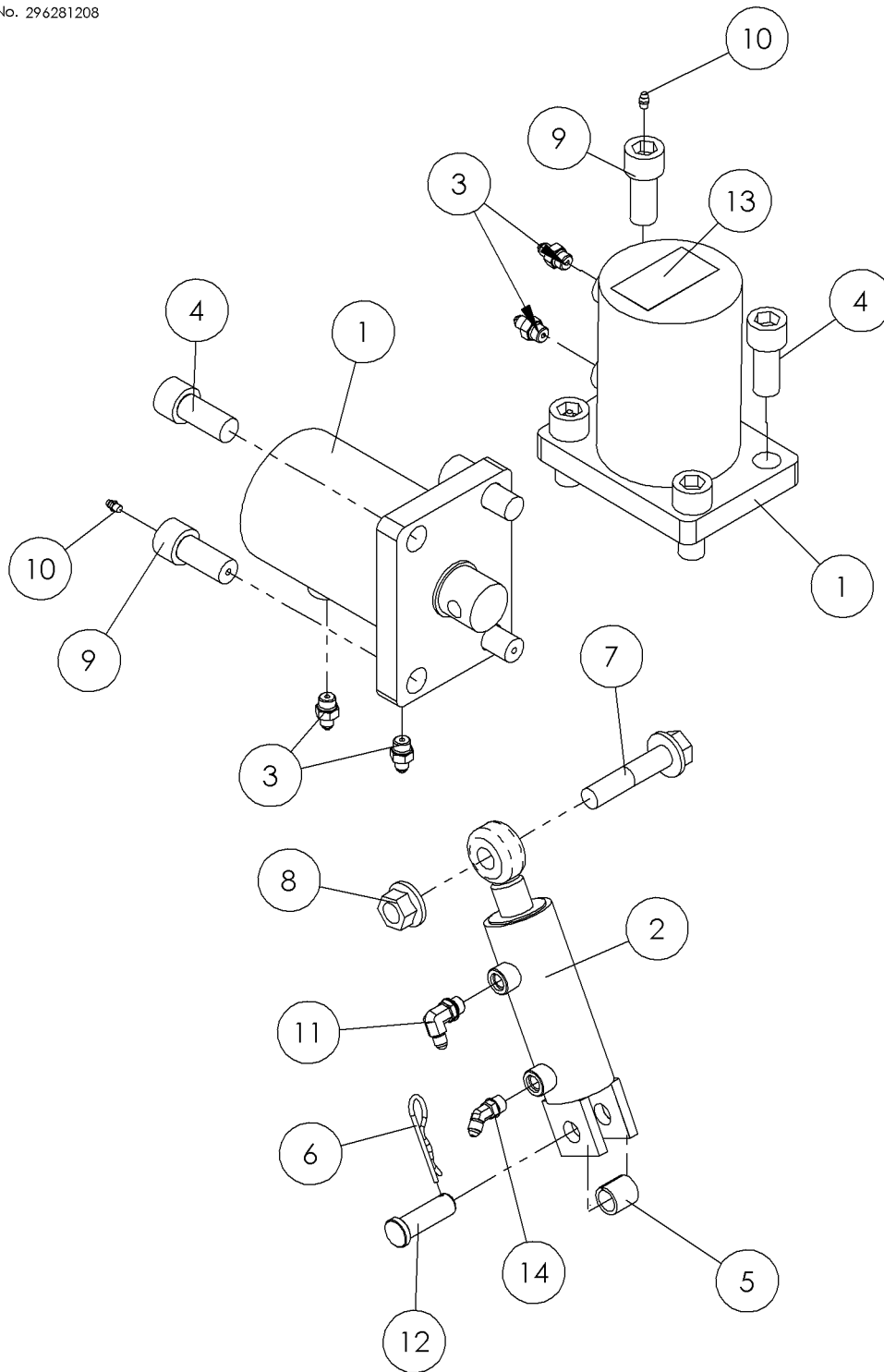


## Components-Vise Valve Fig 9-2z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	May, 2008		Change Part Number
1		228128013	SENSE CHECK	2	
		228128015	SEAL KIT	2	
2	*	296302415	PRESSURE CONTROL VALVE	1	
		296251085	SEAL KIT	1	
3		296265594	VALVE - CHECK	1	
		296265595	SEAL KIT	1	
4		296265596	CARTRIDGE - SOLENOID VALVE	3	Inc. Nuts And Seal Kit.
		296271077	COILS	3	
		296265598	NUT - COIL	3	
		296265599	SEAL KIT	3	
5		296265600	CARTRIDGE - SOLENOID VALVE	2	Inc. Nuts And Seal Kit.
		296271115	COIL	2	
		296265598	NUT - COIL	2	
		296265595	SEAL KIT	2	
		296266538	VALVE - VISE CONTROL		Inc. All Items In Figure.

Vise Cylinders (S/N 284-) Fig 9-3r02

Illustration No. 296281208



## Vise Cylinders (S/N 284-) Fig 9-3r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		232454001	CYLINDER-4X2	2	Breakdown Fig. 9-3z01
2		296307461	*CYLINDER-2X2.50 HYD.	1	Breakdown Fig. 9-3z02
3		57968001	FITTING-STR-4MJ-6MORB	4	
4		121827020	SCREW-7/8-14X2 SK.HD. CAP GR.8	4	
5		1835013	BSHG.-STL.-1 X 3/4 X 1	1	
6		1794003	HAIR PIN COTTER - .148 WIRE	1	
7		296300822	SCREW-HFS-.75-10X3.50-GR8-YZ	1	
8		296300853	NUT-HEXFLGTL-.75-10-G-YZ	1	
9		296275167	SCREW - WITH GREASE PASSAGE	4	
10		598001	FITTING-1/4" NF ST GREASE ZERK	4	
11		57950001	FITTING-90-4MJ-6MORBA	1	
12		295015001	PIN, SAE STANDARD 3/4	1	
13		7000A864	DECAL-WARNING DOMESTIC	1	Domestic
13		700IA864	DECAL-WARNING INTERNATIONAL	1	International
14		82931001	FITTING-45-4MJX6MORBA	1	

Vise Cylinders (S/N 101-283) Fig 9-3r01

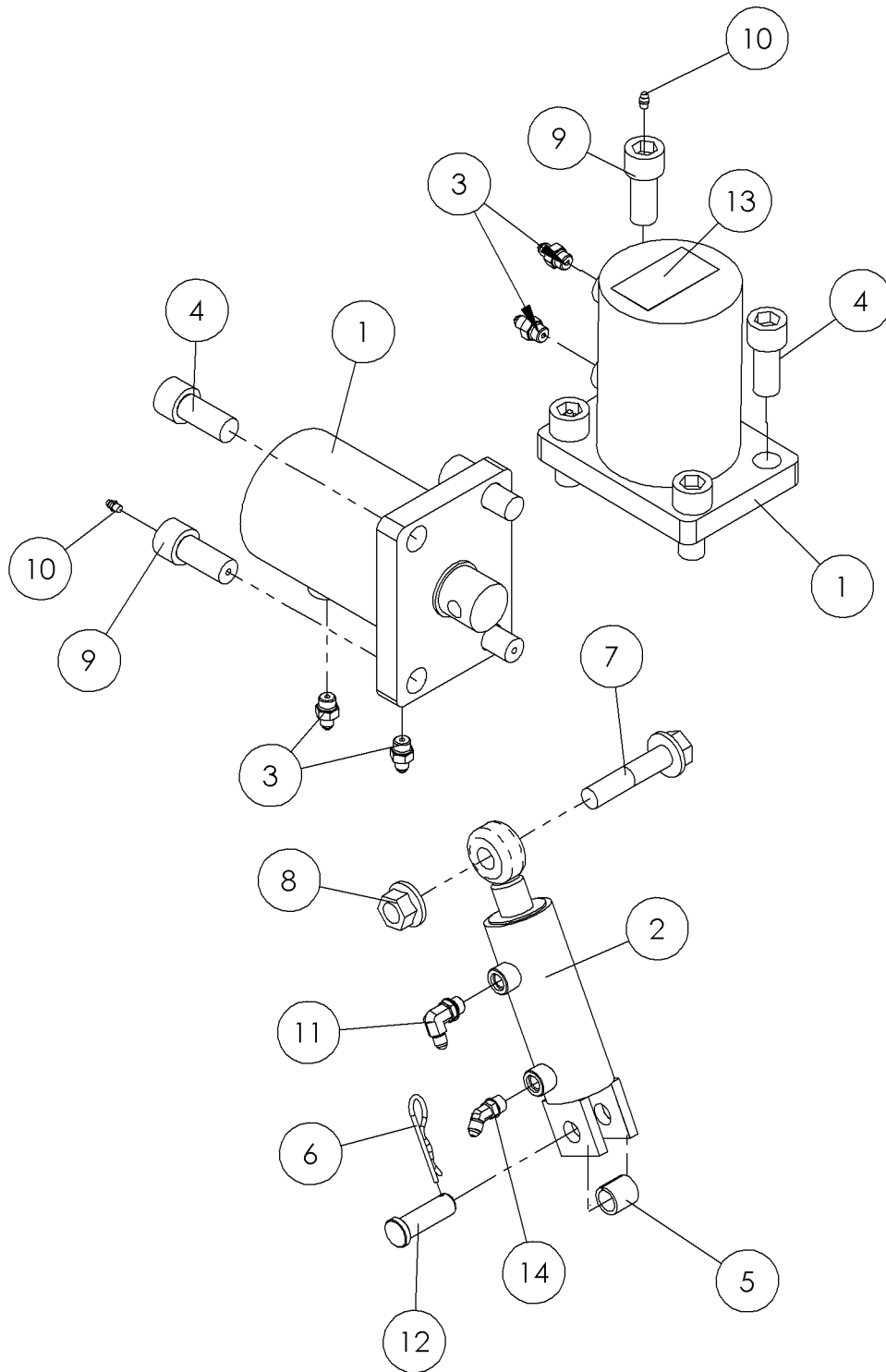


Illustration No. 296281208

## Vise Cylinders (S/N 101-283) Fig 9-3r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Change Fittings
1		232454001	CYLINDER-4X2	2	Breakdown Fig. 9-3a
2		901750001	CYLINDER-2X2 1/2 HYD	1	Breakdown Fig. 9-3b
3	*	57968001	FITTING-STR-4MJ-6MORB	4	
4		121827020	SCREW-7/8-14X2 SK.HD. CAP GR.8	4	
5		1835013	BSHG.-STL.-1 X 3/4 X 1	1	
6		1794003	HAIR PIN COTTER - .148 WIRE	1	
7		296300822	SCREW-HFS-.75-10X3.50-GR8-YZ	1	
8		296300853	NUT-HEXFLGTL-.75-10-G-YZ	1	
9		296275167	SCREW - WITH GREASE PASSAGE	4	
10		598001	FITTING-1/4" NF ST GREASE ZERK	4	
11		57950001	FITTING-90-4MJ-6MORBA	1	
12		295015001	PIN, SAE STANDARD 3/4	1	
13		7000A864	DECAL-WARNING DOMESTIC	1	Domestic
		700IA864	DECAL-WARNING INTERNATIONAL	1	International
14		82931001	FITTING-45-4MJX6MORBA	1	

Vise Cylinders Fig 9-3

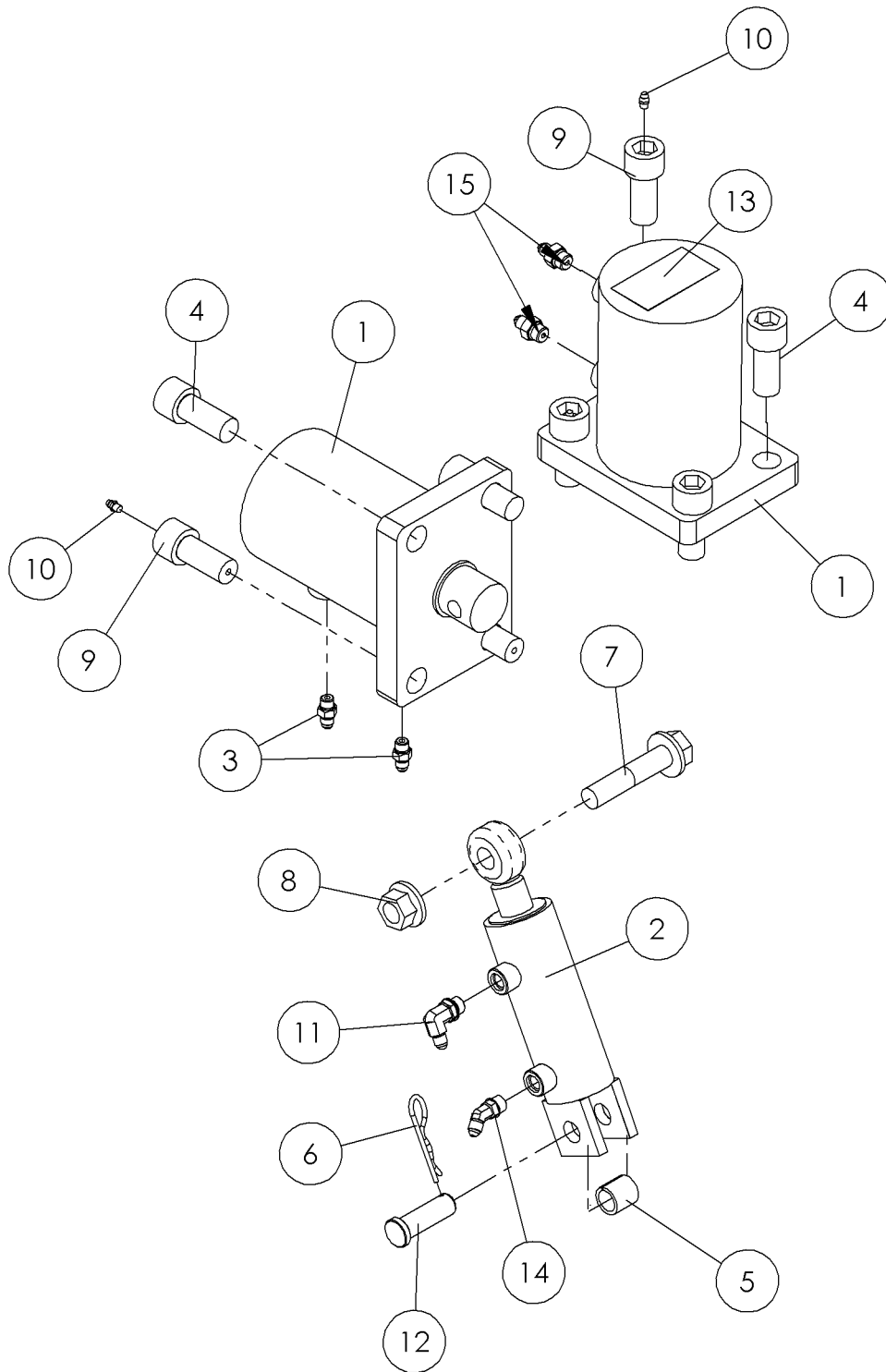
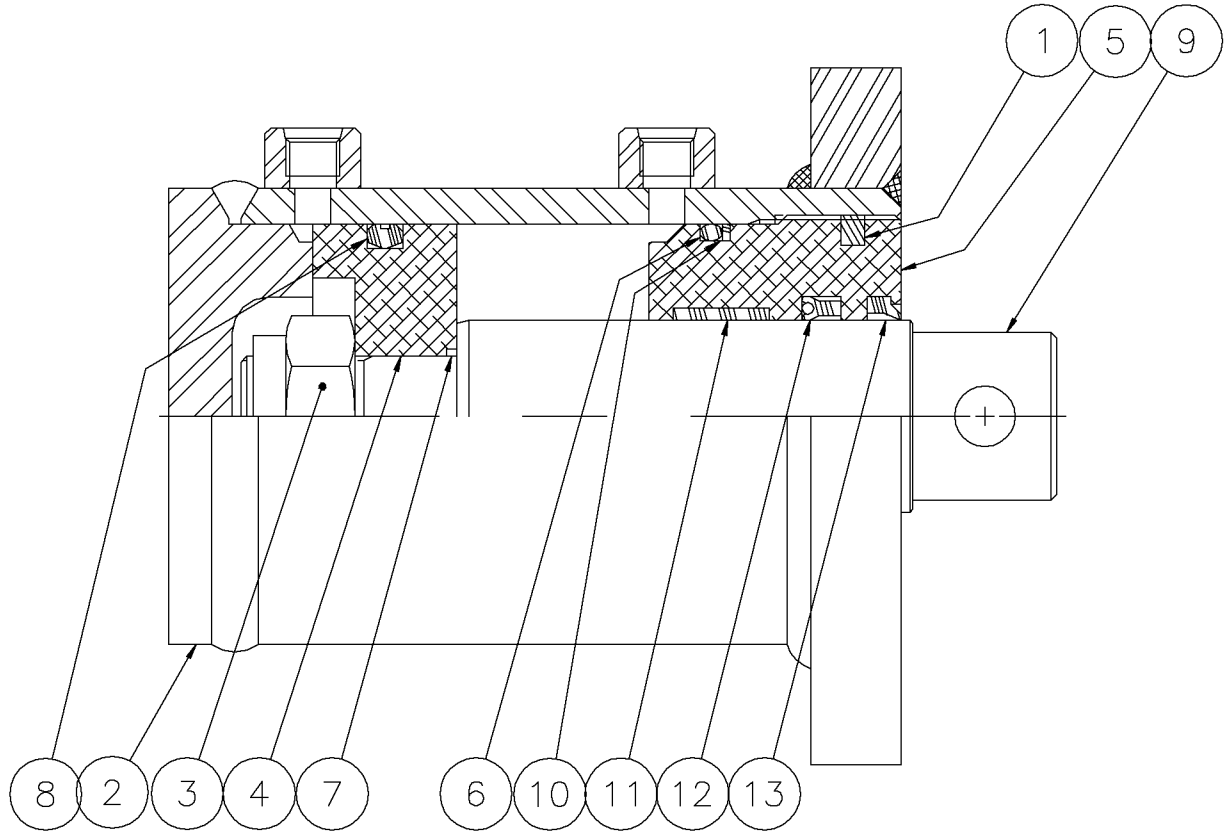


Illustration No. 296281208

## Vise Cylinders Fig 9-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		232454001	CYLINDER-4X2	2	Breakdown Fig. 9-3a
2		901750001	CYLINDER-2X2 1/2 HYD	1	Breakdown Fig. 9-3b
3		60908001	FITTING-4MX4M JIC STR ADAPTER	2	
4		121827020	SCREW-7/8-14X2 SK.HD. CAP GR.8	4	
5		1835013	BSHG.-STL.-1 X 3/4 X 1	1	
6		1794003	HAIR PIN COTTER - .148 WIRE	1	
7		296300822	SCREW-HFS-.75-10X3.50-GR8-YZ	1	
8		296300853	NUT-HEXFLGTL-.75-10-G-YZ	1	
9		296275167	SCREW - WITH GREASE PASSAGE	4	
10		598001	FITTING-1/4" NF ST GREASE ZERK	4	
11		57950001	FITTING-90-4MJ-6MORBA	1	
12		295015001	PIN, SAE STANDARD 3/4	1	
13		7000A864	DECAL-WARNING DOMESTIC	1	Domestic
		700IA864	DECAL-WARNING INTERNATIONAL	1	International
14		82931001	FITTING-45-4MJX6MORBA	1	
15		57968001	FITTING-STR-4MJ-6MORB	2	

Components-Vise Cylinder Fig 9-3z01

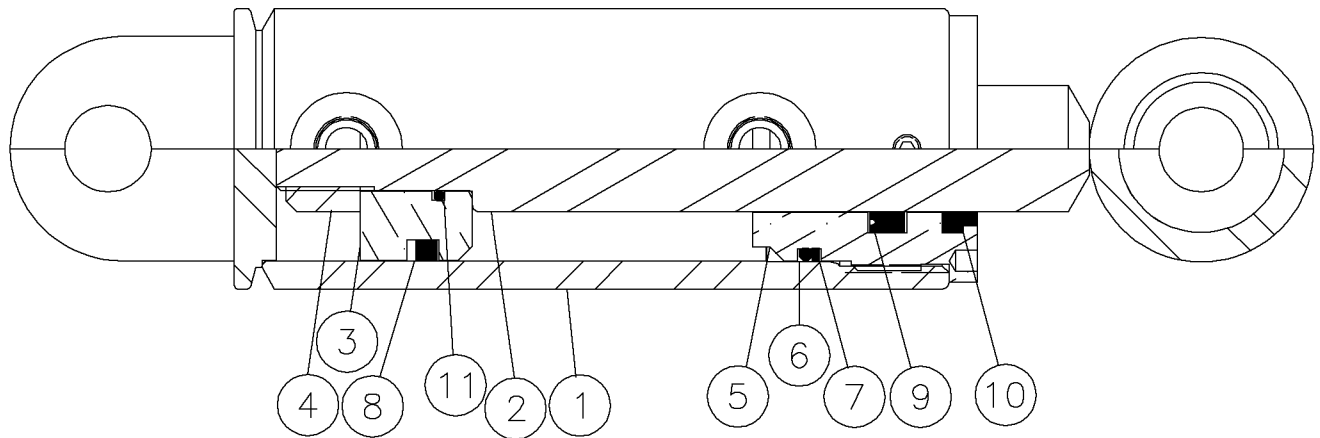




## Components-Vise Cylinder Fig 9-3z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Change Number
1		NSS	LOCKING INSERT	2	Not Separately
2		NSS	ROD WIPER	1	Not Separately
3		NSS	POLYPAK	1	Not Separately
4		NSS	WEARBAND	1	Not Separately
5		NSS	BACKUP RING	1	Not Separately
6		NSS	O-RING	1	Not Separately
7		NSS	O-RING	1	Not Separately
8		NSS	UNIRING	1	Not Separately
9	*	296302414	CYLINDER ROD	1	
10		NSS	HEAD GLAND	1	Not Separately
11		NSS	PISTON	1	Not Separately
12		NSS	LOCKNUT	1	Not Separately
13		NSS	TUBE WELDMENT	1	Not Separately
		232454001	CYLINDER-4X2		Inc. All Items In Figure.
		221730013	SEAL KIT		Inc. Ref. 1-8

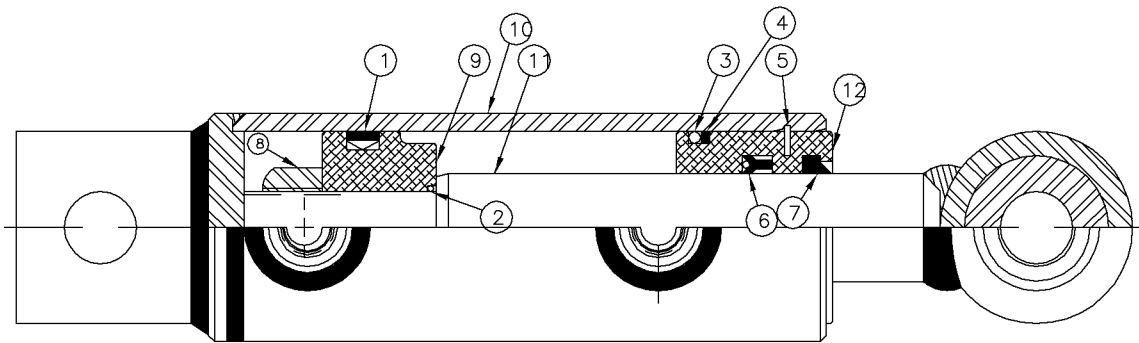
Components-Vise Cylinder (S/N 284-) Fig 9-3z02r01



## Components-Vise Cylinder (S/N 284-) Fig 9-3z02r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1			2" HDI BARREL ASSY	1	Not Sold Separately
2		296302420	1 1/8" SHAFT ASSY	1	
3			2" PISTON 3/4" SHAFT (PSP)	1	Not Sold Separately
4			3/4" FULL LOCK NUT	1	Not Sold Separately
5			2" HDI HEAD 1 1/8" SHAFT (BSS)	1	Not Sold Separately
6			O-RING	1	Not Sold Separately
7			BACKUP	1	Not Sold Separately
8			PSP SEAL	1	Not Sold Separately
9			BS SEAL	1	Not Sold Separately
10			DUST SEAL	1	Not Sold Separately
11			O-RING	1	Not Sold Separately
		296307461	*CYLINDER-2X2.50 HYD.		Inc. All Items In Figure.
		296302421	REPAIR KIT		Inc. Ref.'s 6-11.

Components-Vise Cylinder (S/N 101-283) Fig 9-3z02



## Components-Vise Cylinder (S/N 101-283) Fig 9-3z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	UNIRING	1	Not Sold Separately
2		NSS	O-RING	1	Not Sold Separately
3		NSS	O-RING	1	Not Sold Separately
4		NSS	BACK-UP-RING	1	Not Sold Separately
5		NSS	SNAP RING	1	Not Sold Separately
6		NSS	LOADED U-CUP	1	Not Sold Separately
7		NSS	ROD WIPER	1	Not Sold Separately
8		398001	NUT-3/4X16 GR 8 SLTL	1	
9		200832001	PISTON	1	
10		901750005	BODY ASSY	1	
11		901750003	ROD	1	
12		602200	SNAP RING-INT. N5000-200	1	
		901750001	CYLINDER-2X2 1/2 HYD		Inc. All Items In Figure.
		901750007	REPAIR KIT		Inc. Ref. 1-7

Strike Alert Fig 9-4

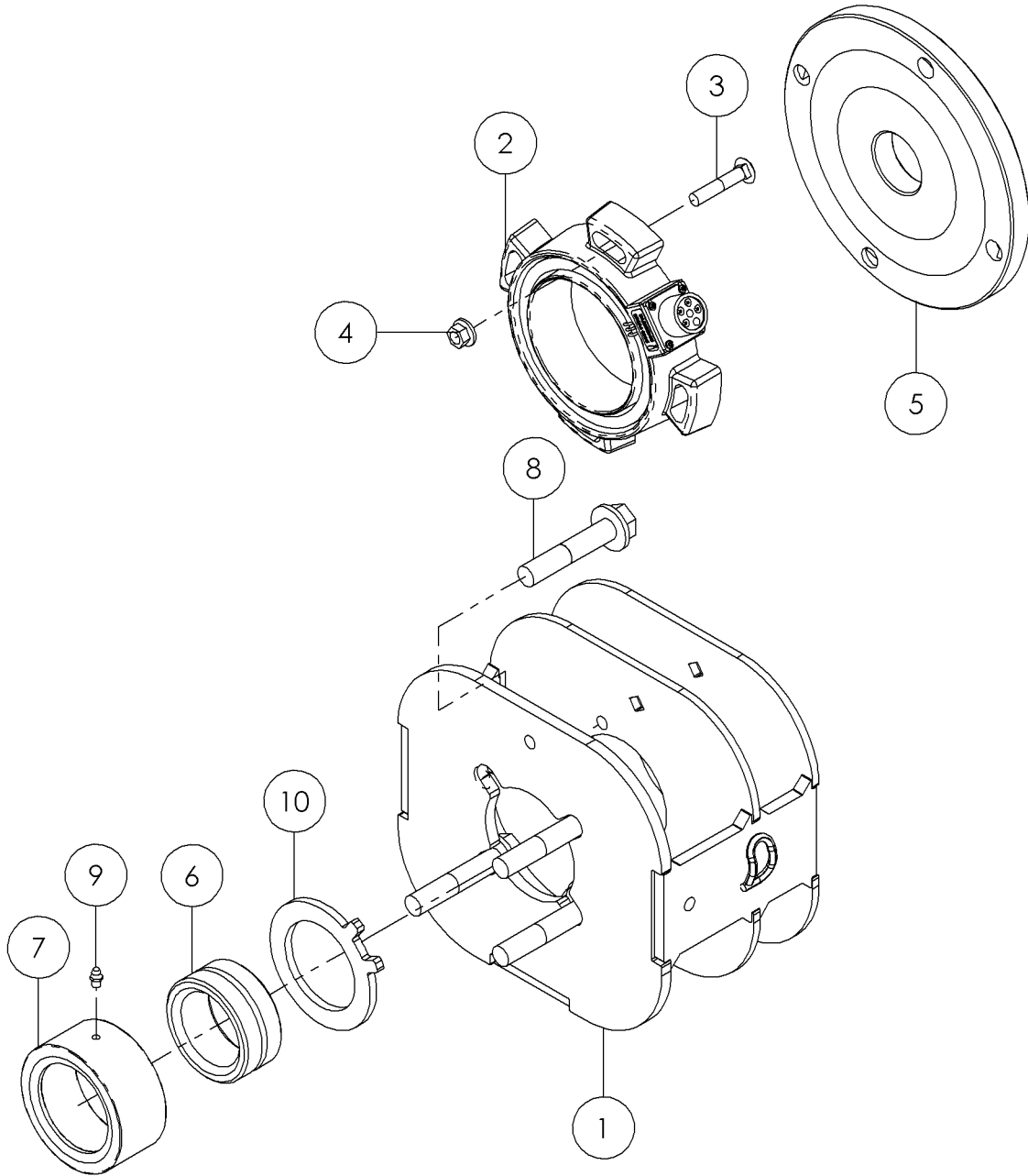


Illustration No. 296281209

## Strike Alert Fig 9-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update Weldment
1	*	296281204	MOUNT - ZAP/ROD WIPER	1	
2		296252772	STRIKE ALERT - 4" COIL ASSEMBLY 2000 TURNS	1	
3		510308120	BOLT - CARG.-.38-16X2.00-GR5-YZ	2	
4		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	
5		235923001	WIPER-2.06 OD ROD	1	
6		296291833	BUSHING ROD GUIDE	1	
7		296291832	TUBE - ROD GUIDE	1	
8		296300807	SCREW-HFS-.63-11X3.25-GR8-YZ	4	
9		598001	FITTING-1/4" NF ST GREASE ZERK	1	
10		296293955	PLATE - ROD GUIDE	1	

Stakedown (S/N 130-) Fig 10-1r02

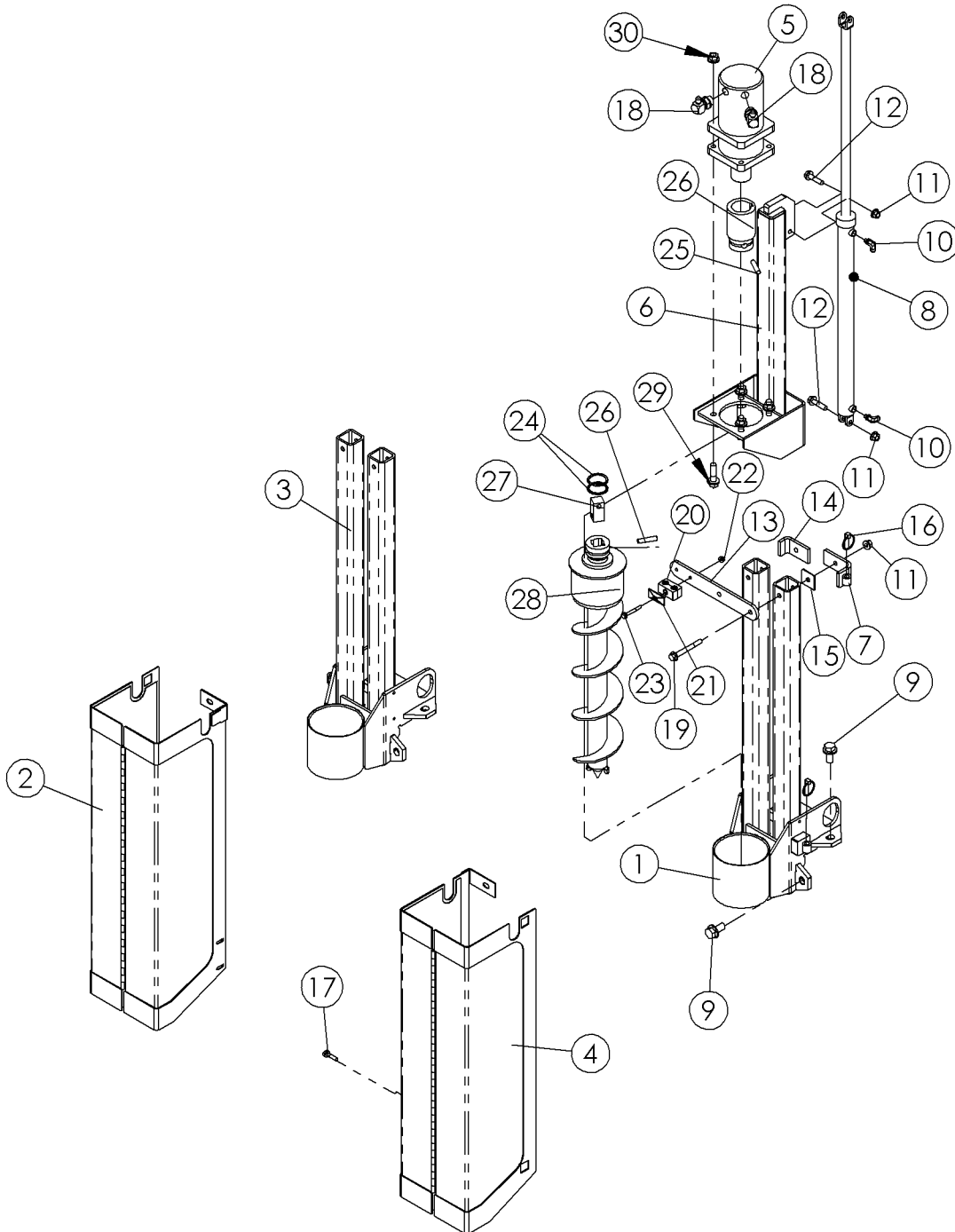


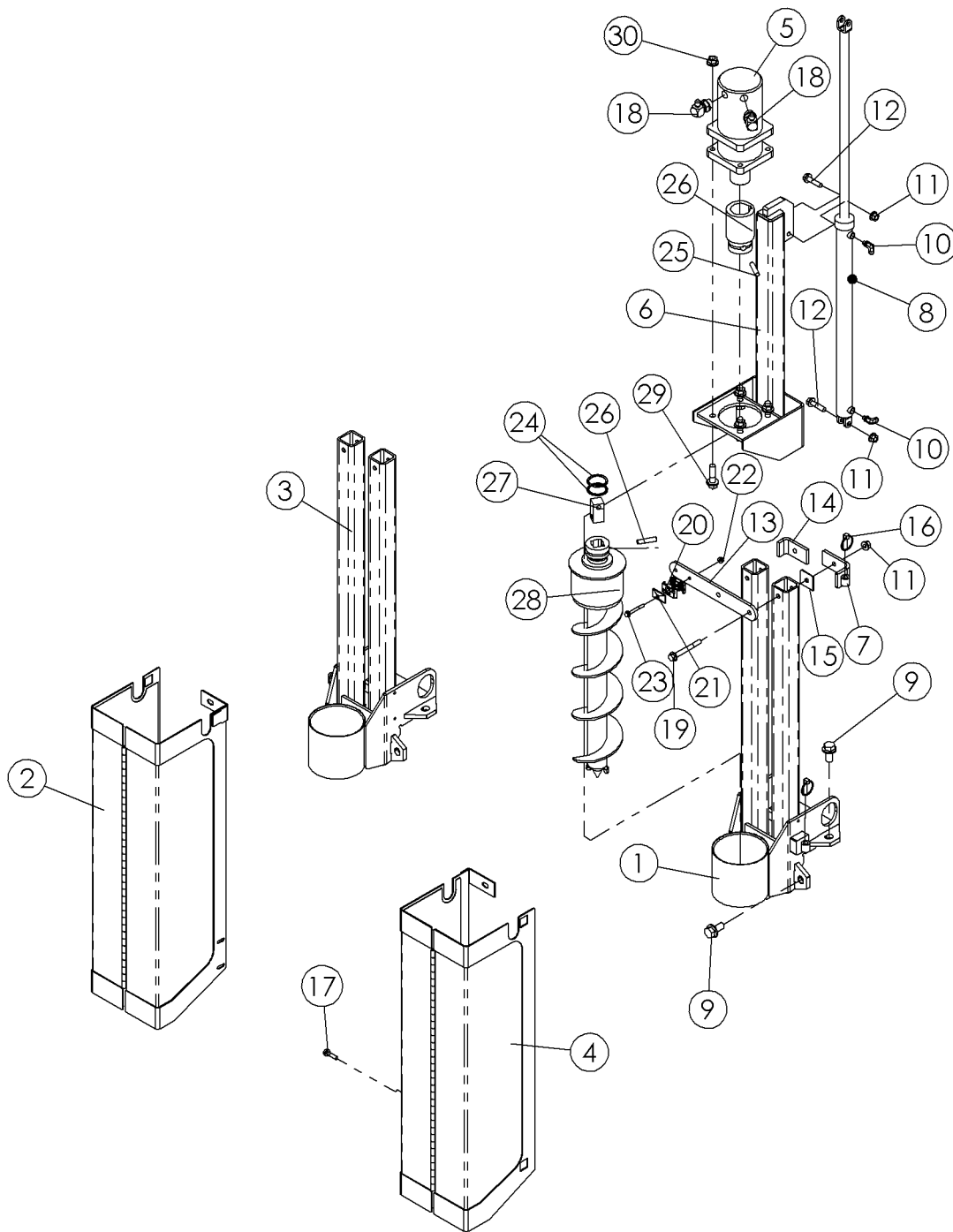
Illustration No. 296284402



## Stakedown (S/N 130-) Fig 10-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Change Clamp number
1		296275488	WELDMENT - TOWER STAKEDOWN LEFT	1	
2		296275486	WELDMENT - STAKE DOWN SHIELD RIGHT	1	
3		296275489	WELDMENT-TOWER STAKEDOWN RIGHT	1	
4		296275438	WELDMENT - STAKE DOWN SHIELD LEFT	1	
5		236219001	HYD MOTOR-66CI	2	Breakdown Fig. 10-1a
6		296265765	MOUNT - SLIDE MOTOR	2	
7		296280264	WELDMENT-MOUNT STAKEDOWN GUARD-UPPER	2	
8		296285659	CYLINDER - 1-1/2 X 24	2	Breakdown Fig. 10-1b
9		296300815	SCREW-HFS-.75-10X1.50-GR8-YZ	8	
10		60906001	4MX6M JIC 90 DEG ELBOW	4	
11		296300851	NUT-HEXFLGTL-.50-13-G-YZ	8	
12		296300792	SCREW-HFS-.50-13X2.00-GR8-YZ	4	
13		279150001	BAR-LIGHT REINFORCEMENT	2	
14		236232001	BAR-GUIDE	2	
15		236233001	PLATE-SPACER	4	
16		1797001	PIN-QUICK TACH. 7/16X1 3/4	4	
17		296300774	SCREW-HFS-..38-16X1.50-GR8-YZ	4	
18		102115001	FITTING - 90 - 6MJ - 12MORBA	4	
19		296300914	SCREW-HFS-.50-13X4.25-GR8-YZ	4	
20	*	72062007	CLAMP - PAIR, 1/2 HYD HOSE	2	(SN 130- )
21	*	72062005	PLATE-TOP CLAMP	2	(SN 130- )
22		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	
23		296300769	SCREW-HFS-.31-28X2.50-GR8-YZ	2	
24		236229001	O-RING - 329	4	
25		236200001	PIN-STAKE KEEPER	4	
26		236205001	HUB-STAKE DRIVE	2	
27		236230001	BAR-STAKE DRIVE	2	
28		232484001	STAKE-6" FLIGHT	2	
29		296300803	SCREW-HFS-.6311X2.25-GR8-YZ	8	
30		296300852	NUT-HEXFLGTL-.63-11-G-YZ	8	

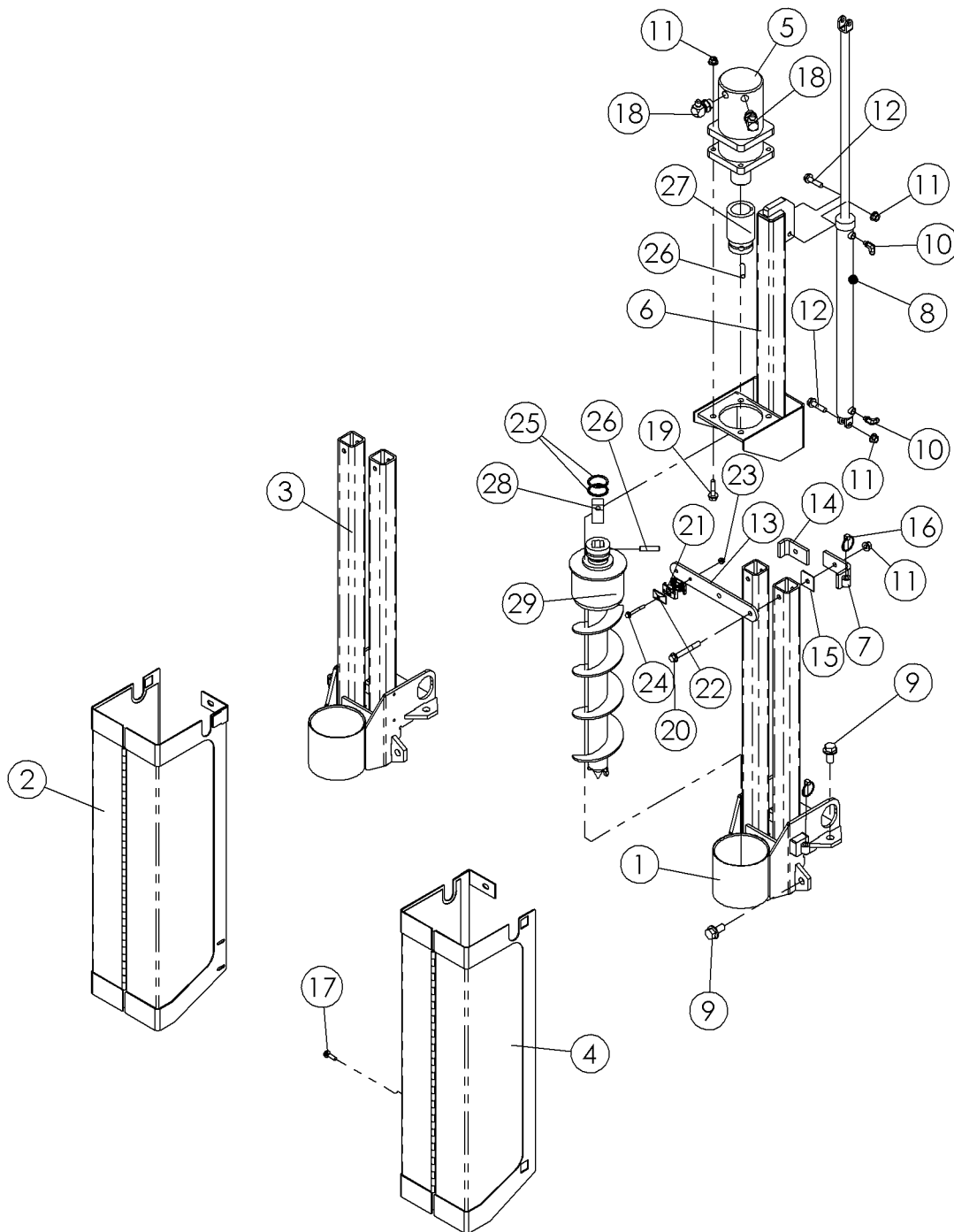
Stakedown (S/N 101-129) Fig 10-1r01



## Stakedown (S/N 101-129) Fig 10-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Change Hardware
1		296275488	WELDMENT - TOWER STAKEDOWN LEFT	1	
2		296275486	WELDMENT - STAKE DOWN SHIELD RIGHT	1	
3		296275489	WELDMENT-TOWER STAKEDOWN RIGHT	1	
4		296275438	WELDMENT - STAKE DOWN SHIELD LEFT	1	
5		236219001	HYD MOTOR-66CI	2	Breakdown Fig. 10-1a
6		296265765	MOUNT - SLIDE MOTOR	2	
7		296280264	WELDMENT-MOUNT STAKEDOWN GUARD-UPPER	2	
8		296285659	CYLINDER - 1-1/2 X 24	2	Breakdown Fig. 10-1b
9		296300815	SCREW-HFS-.75-10X1.50-GR8-YZ	8	
10		60906001	4MX6M JIC 90 DEG ELBOW	4	
11		296300851	NUT-HEXFLGTL-.50-13-G-YZ	8	
12		296300792	SCREW-HFS-.50-13X2.00-GR8-YZ	4	
13		279150001	BAR-LIGHT REINFORCEMENT	2	
14		236232001	BAR-GUIDE	2	
15		236233001	PLATE-SPACER	4	
16		1797001	PIN-QUICK TACH. 7/16X1 3/4	4	
17	*	296300774	SCREW-HFS-..38-16X1.50-GR8-YZ	4	
18		102115001	FITTING - 90 - 6MJ - 12MORBA	4	
19	*	296300914	SCREW-HFS-.50-13X4.25-GR8-YZ	4	
20		900035005	CLAMP-HALF 3/8" DOUBLE (PAIR)	4	
21		900035003	DOUBLE HOSE CLAMP PLATE 3/8	2	
22		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	
23		296300769	SCREW-HFS-.31-28X2.50-GR8-YZ	2	
24		236229001	O-RING - 329	4	
25		236200001	PIN-STAKE KEEPER	4	
26		236205001	HUB-STAKE DRIVE	2	
27		236230001	BAR-STAKE DRIVE	2	
28		232484001	STAKE-6" FLIGHT	2	
29	*	296300803	SCREW-HFS-.6311X2.25-GR8-YZ	8	
30	*	296300852	NUT-HEXFLGTL-.63-11-G-YZ	8	

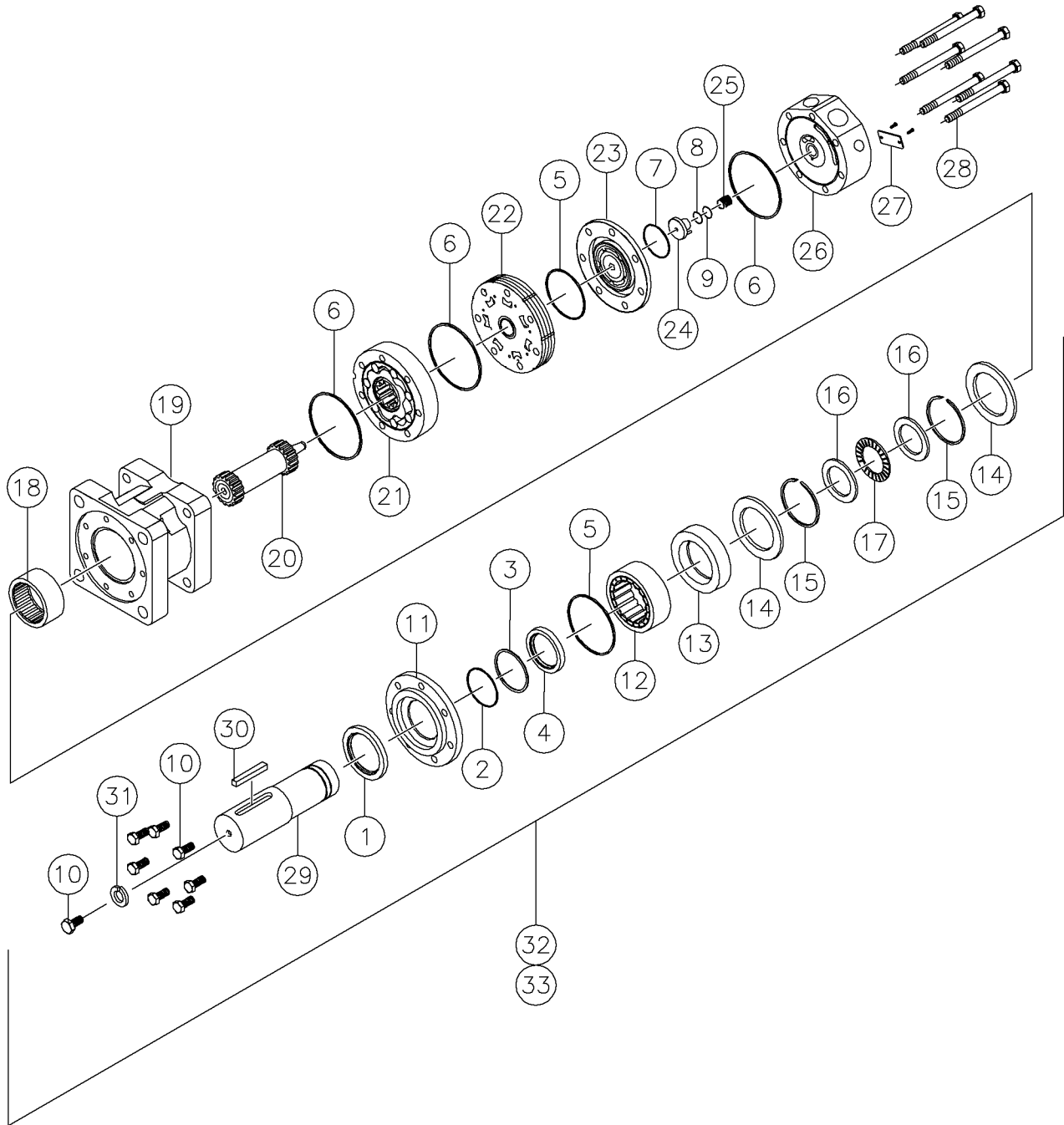
Stakedown Fig 10-1



## Stakedown Fig 10-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296275488	WELDMENT - TOWER STAKEDOWN LEFT	1	
2		296275486	WELDMENT - STAKE DOWN SHIELD RIGHT	1	
3		296275489	WELDMENT-TOWER STAKEDOWN RIGHT	1	
4		296275438	WELDMENT - STAKE DOWN SHIELD LEFT	1	
5		236219001	HYD MOTOR-66CI	2	Breakdown Fig. 10-1a
6		296265765	MOUNT - SLIDE MOTOR	2	
7		296280264	WELDMENT-MOUNT STAKEDOWN GUARD-UPPER	2	
8		296285659	CYLINDER - 1-1/2 X 24	2	Breakdown Fig. 10-1b
9		296300815	SCREW-HFS-.75-10X1.50-GR8-YZ	8	
10		60906001	4MX6M JIC 90 DEG ELBOW	4	
11		296300851	NUT-HEXFLGTL-.50-13-G-YZ	16	
12		296300792	SCREW-HFS-.50-13X2.00-GR8-YZ	4	
13		279150001	BAR-LIGHT REINFORCEMENT	2	
14		236232001	BAR-GUIDE	2	
15		236233001	PLATE-SPACER	4	
16		1797001	PIN-QUICK TACH. 7/16X1 3/4	4	
17		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	4	
18		102115001	FITTING - 90 - 6MJ - 12MORBA	4	
19		296300830	SCREW-HFS-.50-20X2.00-GR8-YZ	8	
20		296300798	SCREW-HFS-.50-13X4.00-GR8-YZ	4	
21		900035005	CLAMP-HALF 3/8" DOUBLE (PAIR)	4	
22		900035003	DOUBLE HOSE CLAMP PLATE 3/8	2	
23		296300849	NUT-HEXFLGTL-.31-18-G-YZ	2	
24		296300769	SCREW-HFS-.31-28X2.50-GR8-YZ	2	
25		236229001	O-RING - 329	4	
26		236200001	PIN-STAKE KEEPER	4	
27		236205001	HUB-STAKE DRIVE	2	
28		236230001	BAR-STAKE DRIVE	2	
29		232484001	STAKE-6" FLIGHT	2	

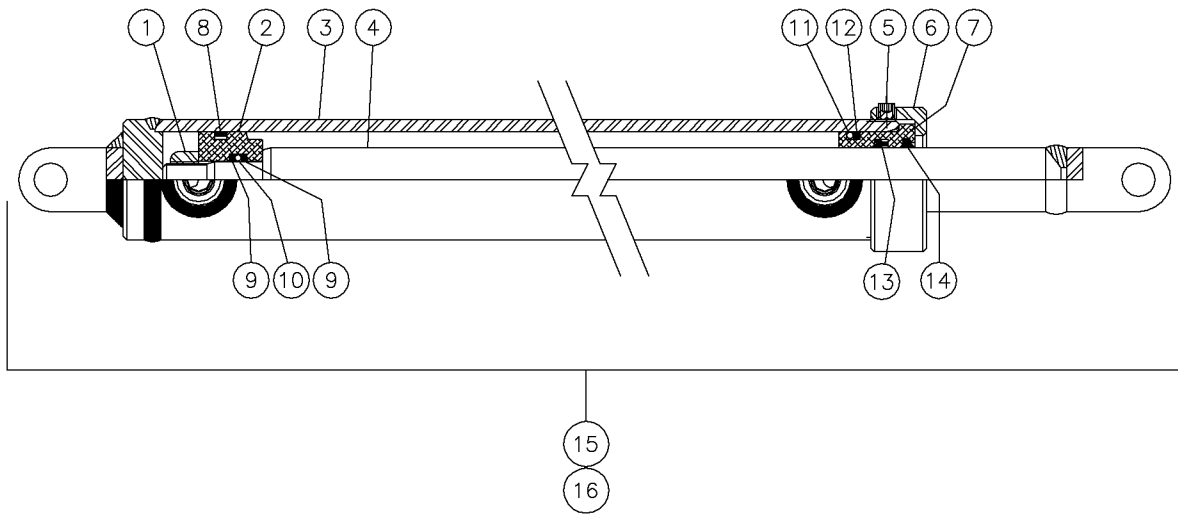
Components-Stakedown Motor Fig 10-1z01



## Components-Stakedown Motor Fig 10-1z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	SEAL-DUST	1	Not Sold Separately
2		NSS	SHIM-METAL BACKUP	1	Not Sold Separately
3		NSS	SEAL-TEFLON BACKUP	1	Not Sold Separately
4		NSS	SEAL-SHAFT	1	Not Sold Separately
5		NSS	SEAL-LATHE CUT	2	Not Sold Separately
6		NSS	SEAL-BODY	3	Not Sold Separately
7		NSS	SEAL-COMMUTATOR	1	Not Sold Separately
8		NSS	SEAL O-RING	1	Not Sold Separately
9		NSS	SEAL-TEFLON BACKUP	1	Not Sold Separately
10		383010	BOLT-1/2-20X1 GR.8 HEX HEAD	8	
11		236219007	RING-PILOT	1	
12		236219009	BEARING-2 1/2" ROLLER	1	
13		236219011	SPACER-BEARING	1	
14		236219013	WASHER-RETAINING	2	
15		236219015	SNAP RING	2	
16		236219017	WASHER-THRUST	2	
17		236219019	BEARING-THRUST	1	
18		236219021	BEARING-REAR HOUSING	1	
19		236219023	HOUSING	1	
20		236219025	DRIVE LINK	1	
21		236219027	ROTOR ASSEMBLY	1	
22		236219029	MANIFOLD	1	
23		236219031	COMMUTATOR ASSEMBLY	1	
24		236219033	PISTON-ENDCOVER	1	
25		236219035	SPRING-PISTON	1	
26		236219037	ENDCOVER	1	Inc. Ref 8, 9, 24, 25
27		NSS	I.D. TAG ASSEMBLY	1	Not Sold Separately
28		236219039	BOLT	7	
29		236219041	SHAFT-ASSEMBLY	1	Inc. Ref 1-5, 10-17, 29-31
30		236219005	KEY-SHAFT	1	
31		480011	WASHER-1/2 S/T LOCK	1	
32		236219003	SEAL KIT-HYD. MOTOR	1	Inc Ref 1-9
33		236219001	HYD MOTOR-66CI	1	Inc All Items In Figure.

Components-Stakedown Cylinder Fig 10-1z02





## Components-Stakedown Cylinder Fig 10-1z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	NUT	1	Not Sold Separately
2		NSS	HEAD	1	Not Sold Separately
3		NSS	PISTON	1	Not Sold Separately
4		NSS	O-RING	1	Not Sold Separately
5		NSS	O-RING	1	Not Sold Separately
6		NSS	BACKUP	1	Not Sold Separately
7		NSS	PSP SEAL	1	Not Sold Separately
8		NSS	BS SEAL	1	Not Sold Separately
9		NSS	DUST SEAL	1	Not Sold Separately
10		NSS	COLLAR	1	Not Sold Separately
11		296285212	SHAFT W/CLEVIS	1	
12		NSS	BARREL W/CLEVIS AND PORTS	1	Not Sold Separately
		296285659	CYLINDER - 1-1/2 X 24		Inc. All Items In Figure.
		296271163	REPAIR KIT		Inc. Ref. 4 Thru 9

Stakedown Valve Fig 10-2r01

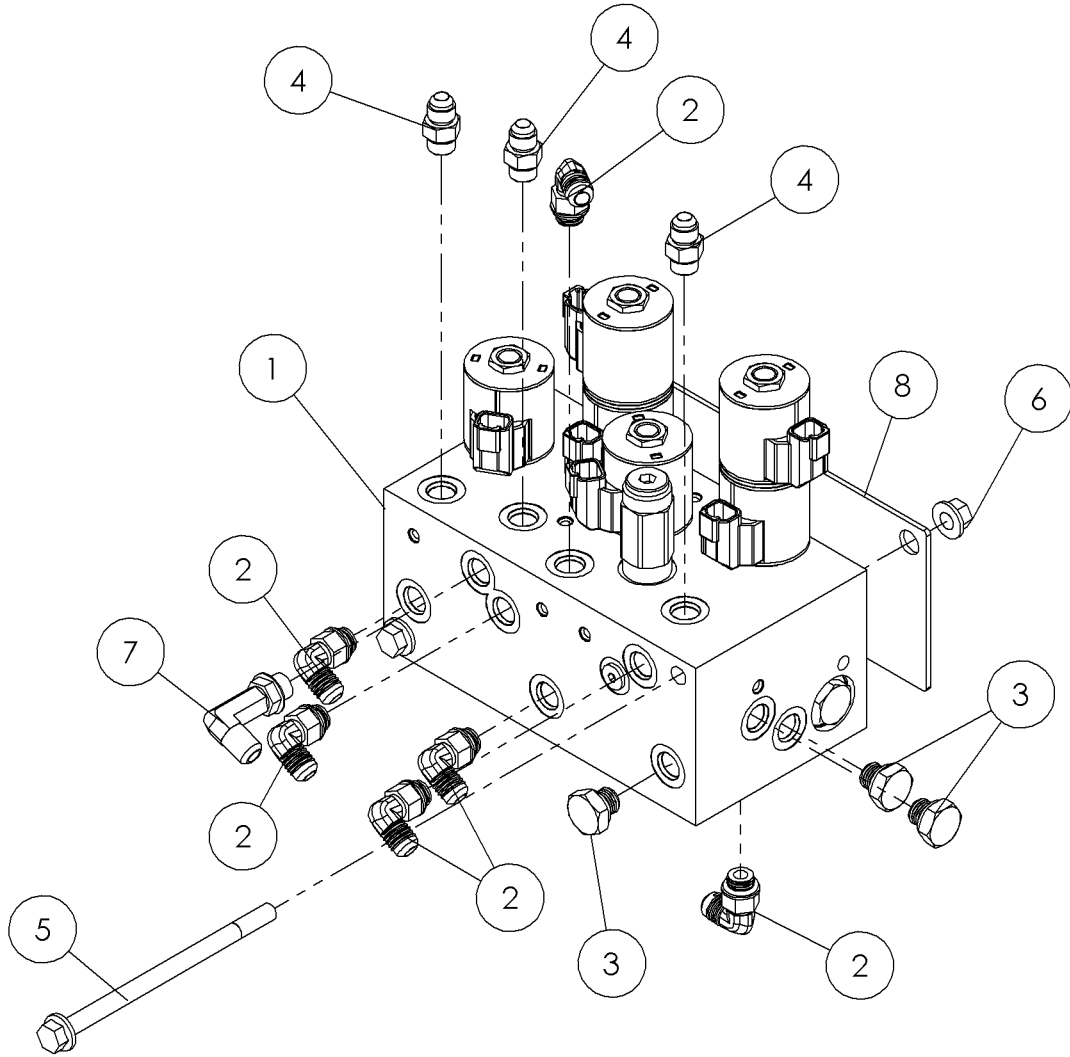


Illustration No. 296291790

## Stakedown Valve Fig 10-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Add Shim
1		296289188	VALVE - STAKEDOWN	1	Breakdown Fig. 10-2a
2		59426001	FITTING - 90-6MJ-6MORBA	6	
3		5553001	PLUG-#6M	3	
4		65565001	FITTING-6M O-RING X 6M JIC ST	3	
5		296300911	SCREW-HFS-.38-16x6.00-GR8-YZ	2	
6		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	
7		65570001	FITTING - 6MB - 6MJ 90 L	1	
8	*	296308030	SHIM - STAKEDOWN VALVE	1	

Stakedown Valve Fig 10-2

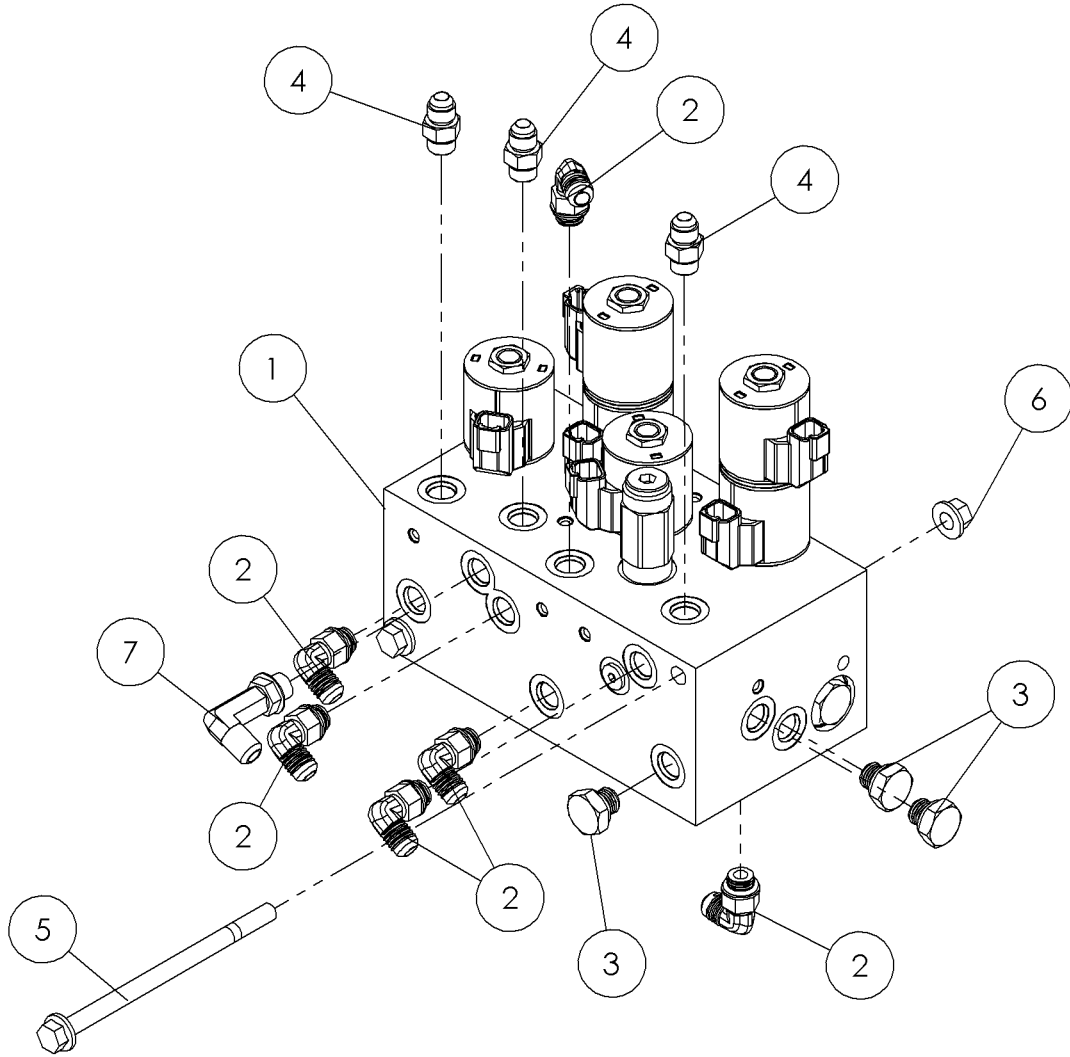
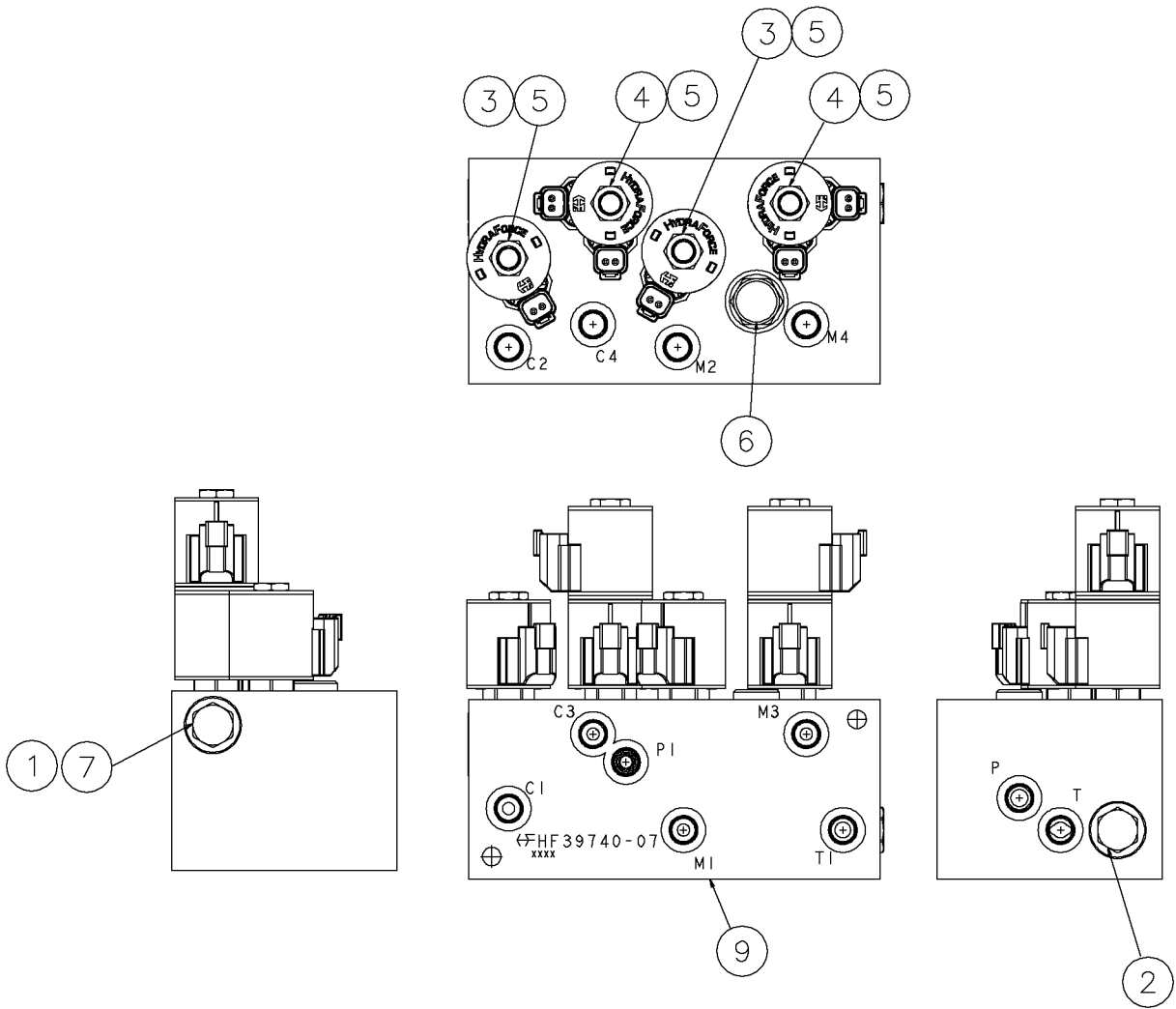


Illustration No. 296291790

## Stakedown Valve Fig 10-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296289188	VALVE-STAKEDOWN	1	Breakdown Fig. 10-2a
2		59426001	FITTING - 90-6MJ-6MORBA	6	
3		5553001	FITTING - PLUG - 6MORB - HEX	3	
4		65565001	FITTING - 6M O-RING X 6M JIC ST.	3	
5		296300911	SCREW-HFS-.38-16X6.00-GR8-YZ	2	
6		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	
7		65570001	6M X 6M JIC 90 DEGREE LONG	1	

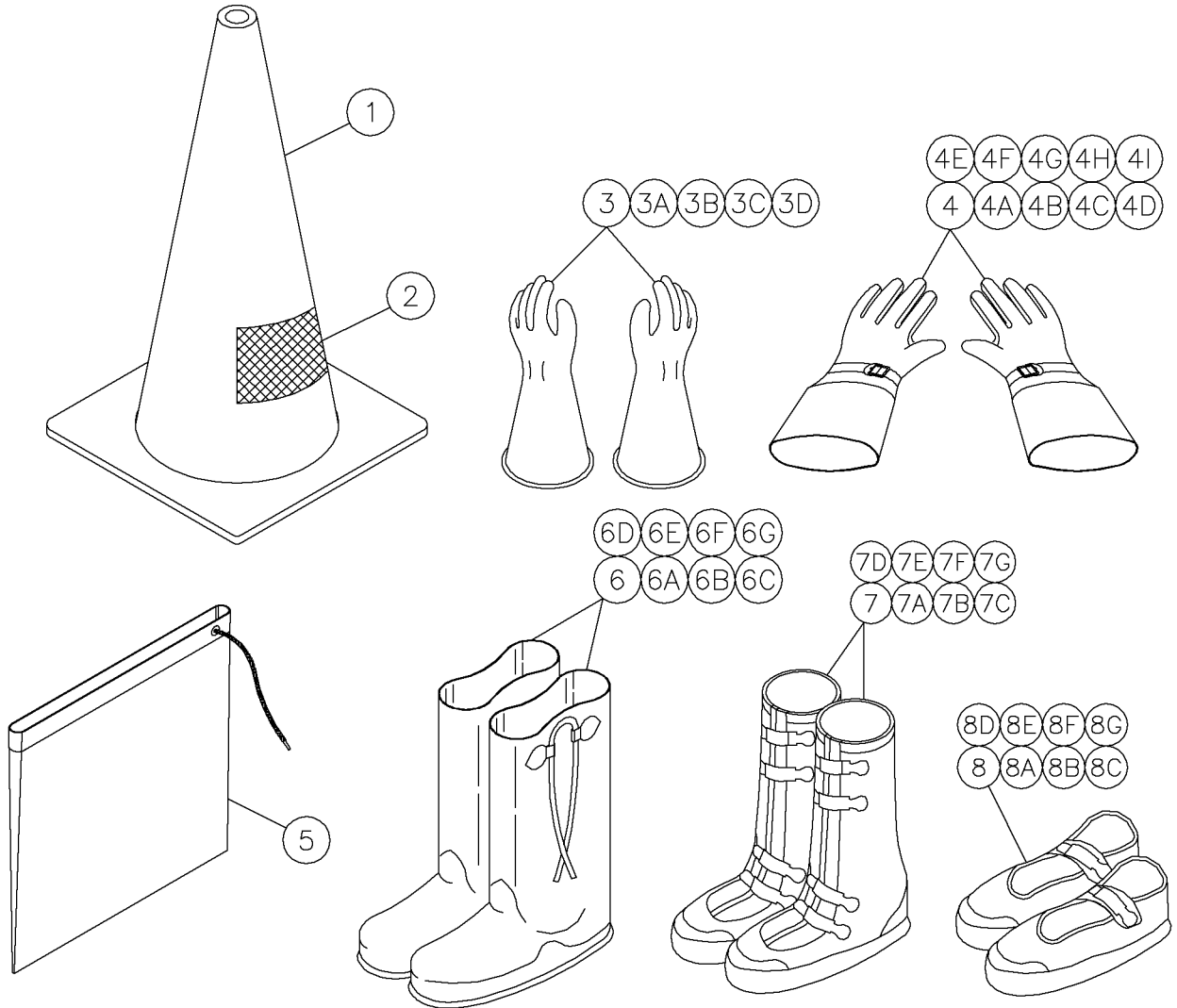
Components-Stakedown Valve Fig 10-2z01



## Components-Stakedown Valve Fig 10-2z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296276779	CHECK VALVE	1	
		296265595	SEAL KIT		
2		296276878	CHECK VALVE	1	
		296265595	SEAL KIT		
3		296276880	SOLENOID VALVE	2	
		251118005	SEAL KIT		
4		296271086	SOLENOID VALVE	2	
		296265599	SEAL KIT		
5		296265644	COIL	6	
6		296302294	REGULATOR - PRESSURE FLOW	1	
		500659019	SEAL KIT-SOLENOID,SPOOL,2-WAY		
7		246415003	PILOT PISTON	1	
8		278267015	PLUG	11	
9		NSS	BLOCK	1	Not Sold Separately
		296289188	VALVE-STAKEDOWN		Includes All Items In Figure.

Feature Gloves-Boots-Cones Fig 10-3





## Feature Gloves-Boots-Cones Fig 10-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		904541001	CONES-ORANGE PVC	4	
2		70000530	DECAL-DANGER	4	Domestic
2		70001530	DECAL- DANGER	4	International
3		210782001	GLOVES-SIZE 9 RUBBER INSULATE	1	
3A		210782005	GLOVES-SIZE 9 1/2 RUBBER INSUL (PAIR)	1	
3B		210782003	GLOVES-SIZE 10 RUBBER INS (PAIR)	1	
3C		210782007	GLOVE-SIZE 11 RUBBER INSULATED	1	
3D		210782009	GLOVE-SIZE 12 RUBBER INSULATED	1	
4		210783001	GLOVES-SIZE 9 LEATHER PROT (PAIR)	1	
4A		210783005	GLOVES SIZE 9 1/2 LEATHER PROT (PAIR)	1	
4B		210783003	GLOVES-SIZE 10 LEATHER PROTECT (PAIR)	1	
4C		210783007	GLOVE-SIZE 11 LEATHER PROTECT	1	
4D		210783008	GLOVE-SIZE 12 LEATHER PROTECT	1	
4E		210781001	GLOVE KIT-SIZE 9	1	Inc 1pr Rubber Gloves 1pr Leather Gloves & 1 Glove Bag Ref No 5
4F		224979001	GLOVE KIT-SIZE 9 1/2	1	Inc 1pr Rubber Gloves 1pr Leather Gloves & 1 Glove Bag Ref No 5
4G		210785001	GLOVE KIT-SIZE 10 (PAIR)	1	Inc 1pr Rubber Gloves 1pr Leather Gloves & 1 Glove Bag Ref No 5
4H		224990001	GLOVE KIT-SIZE 11	1	Inc 1pr Rubber Gloves 1pr Leather Gloves & 1 Glove Bag Ref No 5
4I		224991001	GLOVE KIT-SIZE 12	1	Inc 1pr Rubber Gloves 1pr Leather Gloves & 1 Glove Bag Ref No 5
5		210784001	BAG-GLOVE	1	
6		210780009	BOOTS-SIZE 9 OVER-THE-SHOE	1	
6A		210780001	BOOTS-SIZE 10 OVER-THE-SHOE	1	
6B		210780003	BOOTS-SIZE 11 OVER-THE-SHOE	1	
6C		210780005	BOOTS-SIZE 12 OVER-THE-SHOE	1	
6D		210780007	BOOTS-SIZE 13 OVER-THE-SHOE	1	
6E		210780011	BOOTS-SIZE 14 OVER-THE-SHOE	1	
6F		210780013	BOOTS-SIZE 15 OVER-THE-SHOE	1	
6G		210780015	BOOTS-SIZE 16 OVER-THE-SHOE	1	
7		279118001	BOOT - 4 BUCKLE SIZE 9	1	
7A		279118002	BOOT-4 BUCKLE SIZE 10	1	
7B		279118003	BOOT 4 BUCKLE SIZE 11	1	
7C		279118004	BOOT - 4 BUCKLE SIZE 12	1	
7D		279118005	BOOT - 4 BUCKLE SIZE 13	1	
7E		279118006	BOOT - 4 BUCKLE SIZE 14	1	
7F		279118007	BOOT - 4 BUCKLE SIZE 15	1	
7G		279118008	BOOT - 4 BUCKLE SIZE 16	1	
8		279119001	BOOT - ANKLE RUBBER SIZE9	1	
8A		279119002	BOOT - ANKLE RUBBER SIZE 10	1	
8B		279119003	BOOT - ANKLE RUBBER SIZE 11	1	
8C		279119004	BOOT - ANKLE RUBBER SIZE 12	1	
8D		279119005	BOOT - ANKLE RUBBER SIZE 13	1	
8E		279119006	BOOT - ANKLE RUBBER SIZE 14	1	
8F		279119007	BOOT - ANKLE RUBBER SIZE 15	1	
8G		279119008	BOOT - ANKLE RUBBER SIZE 16	1	

Rod Box Fig 11-1r03

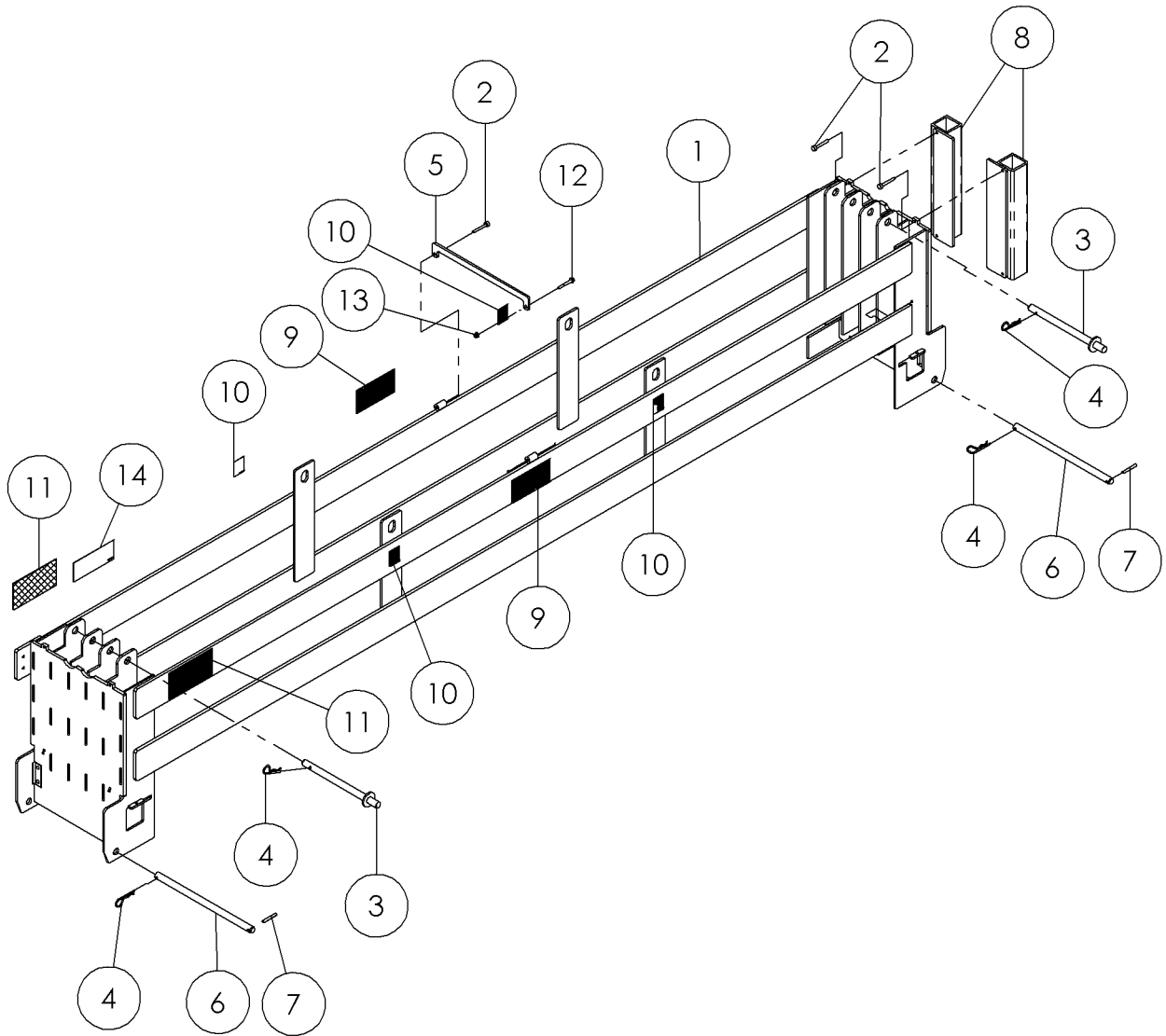


Illustration No. 296281216

## Rod Box Fig 11-1r03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Change Decal
1		NSS	BOX - 2.06 ROD	1	Not Sold Separately
2		2108001	LYNCH PIN - 1/4 X 2	3	
3		296281221	PIN - .75 X 11.50	2	
4		1794003	HAIR PIN COTTER - .148 WIRE	4	
5		296291803	BAR - ROD BOX CROSS	1	
6		296293785	RD - PIN .75 DIA. X 14.775	2	
7		510342839	PIN EXPANSION 1/4 X 2 YZ	2	
8		296293977	TUBE - ROD RETAINER	2	
9		70000563	DECAL-WARNING (UND)	2	Domestic
		7000I563	DECAL-WARNING (UND)	2	International
10		7000I445	DECAL-LIFT POINT	4	Domestic/International
11		7000A576	DECAL-DANGER	2	Domestic
		700IA576	DECAL-DANGER	2	International
12		296300758	SCREW-HFS-.25-20X2.00-GRI-YZ	1	
13		296300848	NUT-HEXFLGTL-.25-20-G-YZ	1	
14	*	700ID745	DECAL - ROD POSITIONER	1	Domestic/International
		296302401	D20X22 II ROD BOX W/DECALS - DOMESTIC		(Inc. Ref's 1, 9-11, & 14).
		296302402	D20X22 II ROD BOX W/DECALS - INTERNATIONAL		(Inc. Ref's 1, 9-11, & 14).

Rod Box Fig 11-1r02

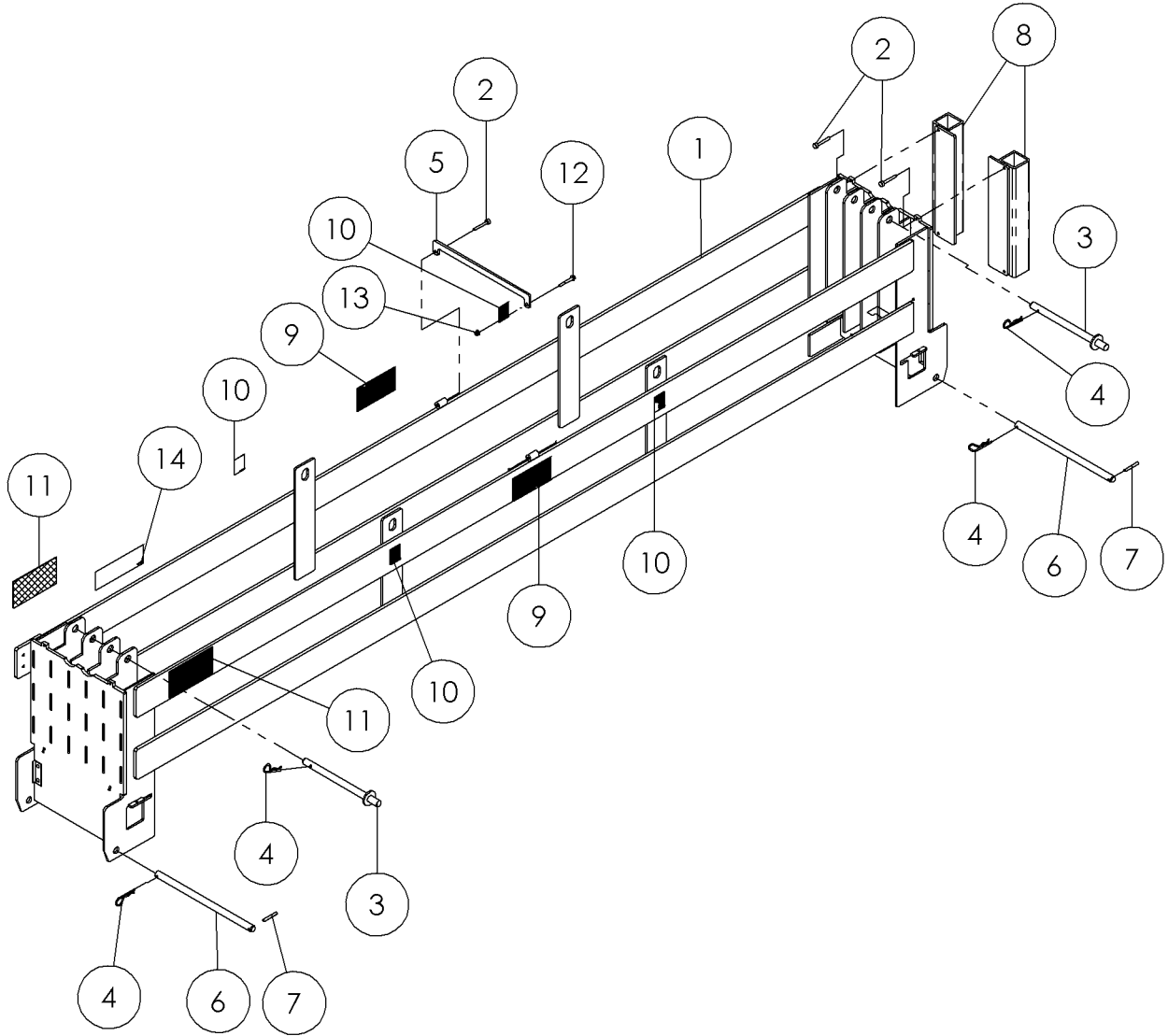


Illustration No. 296281216

## Rod Box Fig 11-1r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	December, 2007		Add Decal
1		296284387	BOX - 2.06 ROD	1	Not Sold Separately
2		2108001	LYNCH PIN - 1/4 X 2	3	
3		296281221	PIN - .75 X 11.50	2	
4		1794003	HAIR PIN COTTER - .148 WIRE	4	
5		296291803	BAR - ROD BOX CROSS	1	
6		296293785	RD - PIN .75 DIA. X 14.775	2	
7		510342839	PIN EXPANSION 1/4 X 2 YZ	2	
8		296293977	TUBE - ROD RETAINER	2	
9		70000563	DECAL-WARNING (UND)	2	Domestic
		7000I563	DECAL-WARNING (UND)	2	International
10		7000I445	DECAL-LIFT POINT	4	Domestic/International
11		7000A576	DECAL-DANGER	2	Domestic
		700IA576	DECAL-DANGER	2	International
12		296300758	SCREW-HFS-.25-20X2.00-GRI-YZ	1	
13		296300848	NUT-HEXFLGTL-.25-20-G-YZ	1	
14	*	700IB500	DECAL - ROD POSITIONER	1	Domestic/International
		296302401	D20X22 II ROD BOX W/DECALS - DOMESTIC		(Inc. Ref. 1, 9-11, & 14).
		296302402	D20X22 II ROD BOX W/DECALS - INTERNATIONAL		(Inc. Ref. 1, 9-11, & 14).

Rod Box Fig 11-1r01

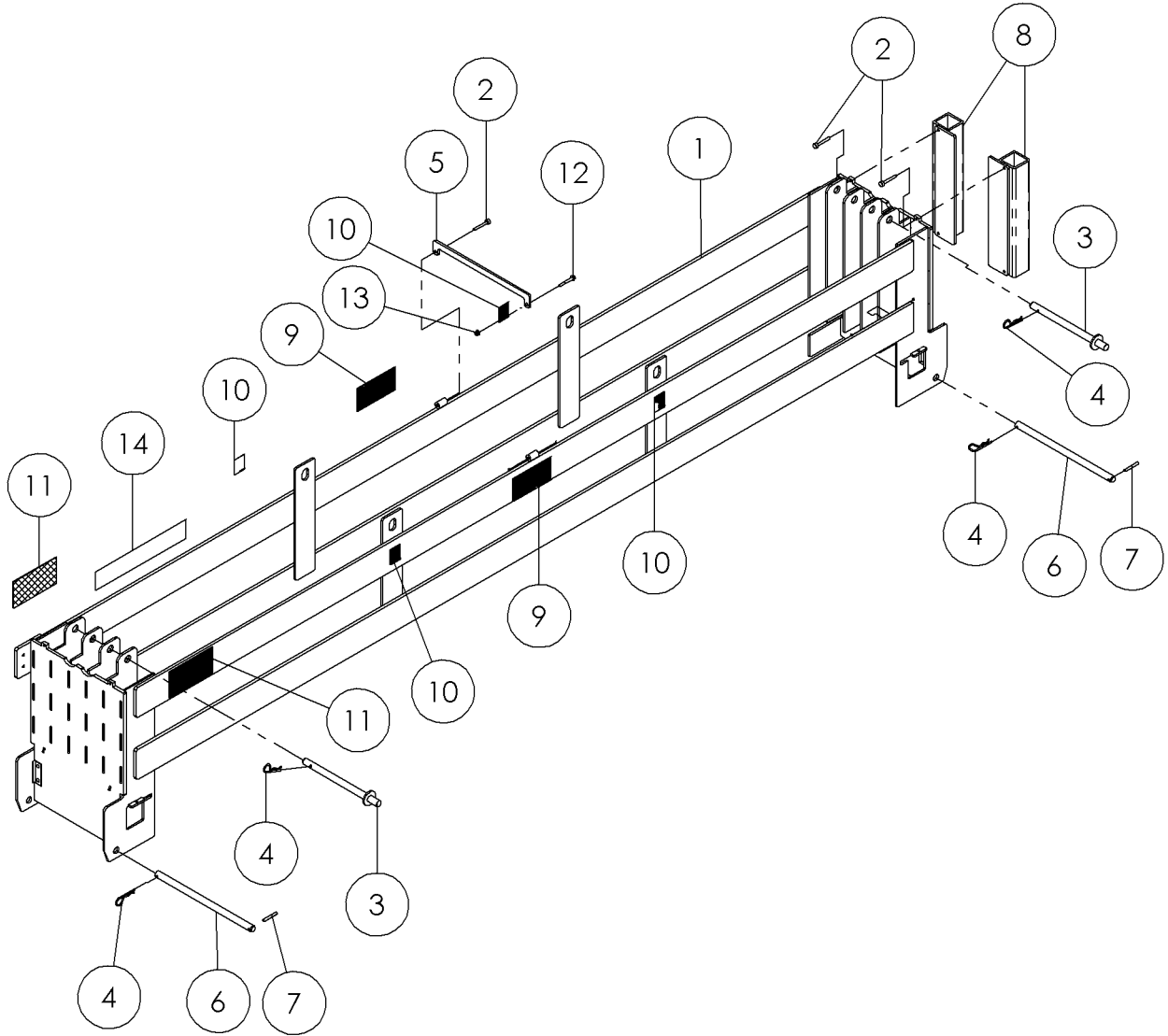


Illustration No. 296281216

## Rod Box Fig 11-1r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Parts List.
1		NSS	BOX - 2.06 ROD	1	Not Sold Separately
2		2108001	LYNCH PIN - 1/4 X 2	3	
3		296281221	PIN - .75 X 11.50	2	
4		1794003	HAIR PIN COTTER - .148 WIRE	4	
5		296291803	BAR - ROD BOX CROSS	1	
6		296293785	RD - PIN .75 DIA. X 14.775	2	
7		510342839	PIN EXPANSION 1/4 X 2 YZ	2	
8		296293977	TUBE - ROD RETAINER	2	
9		70000563	DECAL-WARNING (UND)	2	Domestic
		7000I563	DECAL-WARNING (UND)	2	International
10		7000I445	DECAL-LIFT POINT	4	
11		7000A576	DECAL-DANGER	2	Domestic
		700IA576	DECAL-DANGER	2	International
12		296300758	SCREW-HFS-.25-20X2.00-GRI-YZ	1	
13		296300848	NUT-HEXFLGTL-.25-20-G-YZ	1	
14		700IA997	DECAL - GEARBOX POSITION	1	
	*	296302401	D20X22 II ROD BOX W/DECALS - DOMESTIC		(Inc. Refs. 1, 9-11, & 14)
	*	296302402	D20X22 II ROD BOX W/DECALS - INTERNATIONAL		(Inc. Refs. 1, 9-11, & 14)

Rod Box Fig 11-1

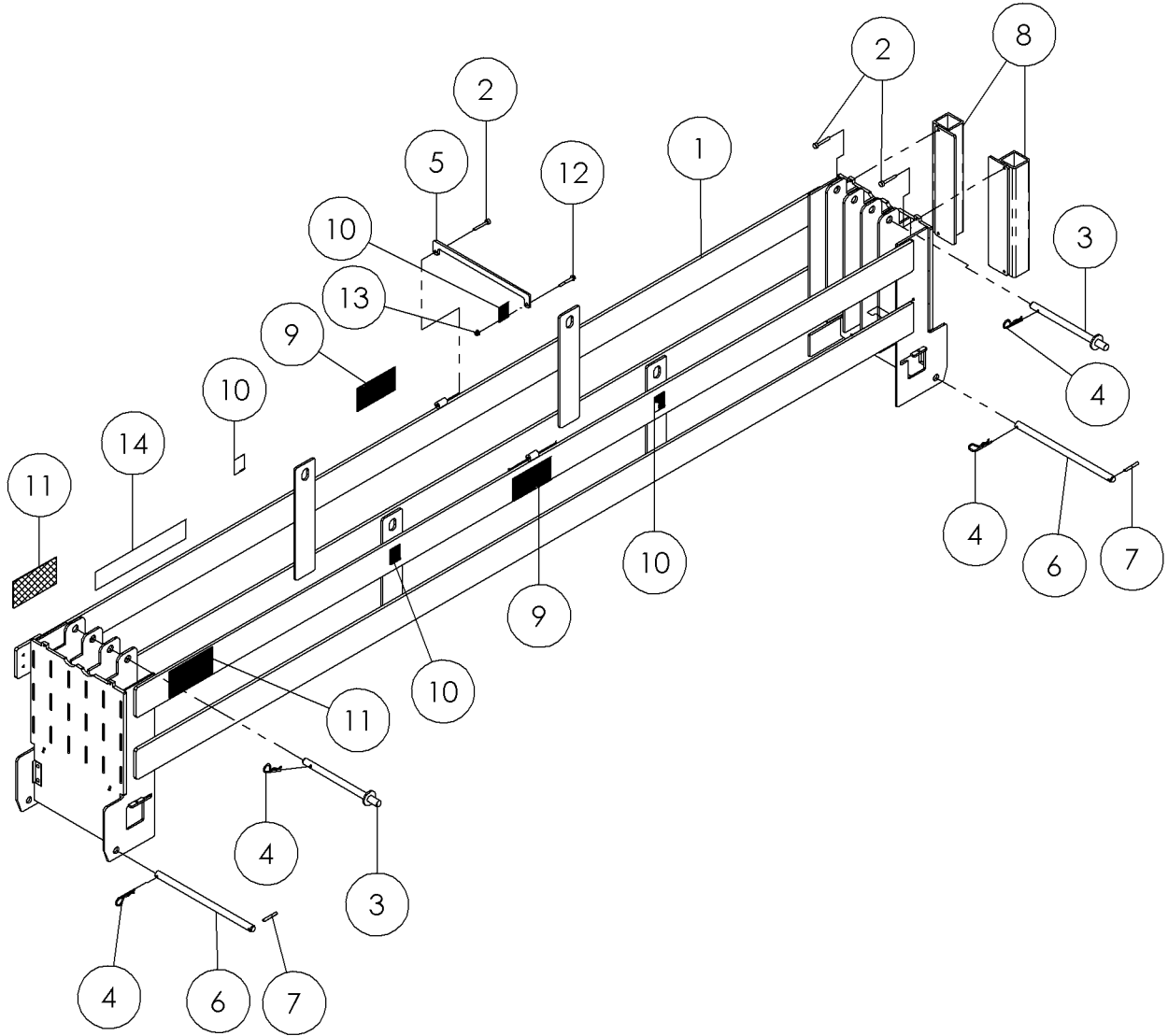


Illustration No. 296281216

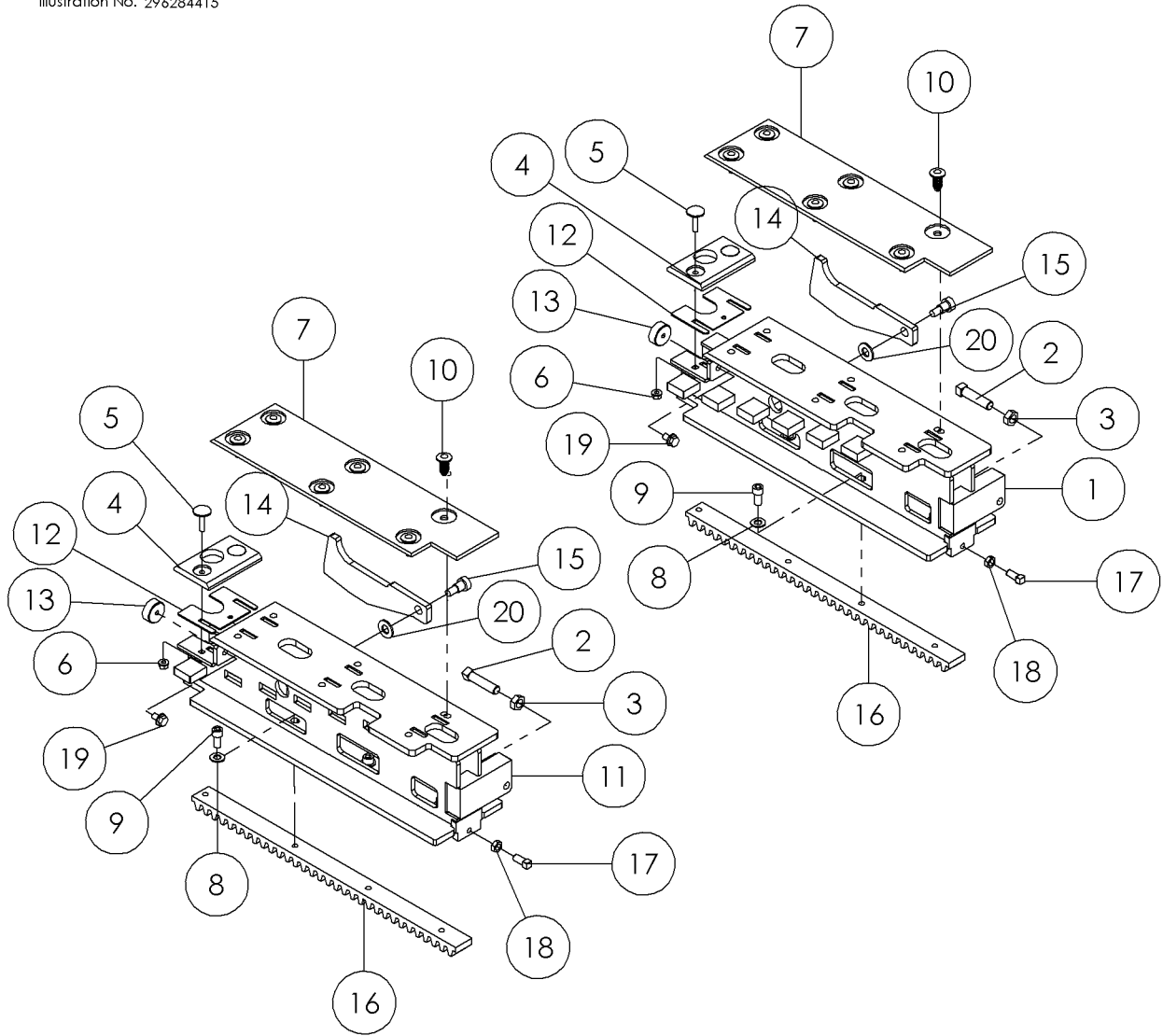


## Rod Box Fig 11-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284387	BOX - 2.06 ROD	1	
2		2108001	LYNCH PIN - 1/4 X 2	3	
3		296281221	PIN - .75 X 11.50	2	
4		1794003	HAIR PIN COTTER - .148 WIRE	4	
5		296291803	BAR - ROD BOX CROSS	1	
6		296293785	RD - PIN .75 DIA. X 14.775	2	
7		510342839	PIN EXPANSION 1/4 X 2 YZ	2	
8		296293977	TUBE - ROD RETAINER	2	
9		70000563	DECAL-WARNING (UND)	2	Domestic
		7000I563	DECAL-WARNING (UND)	2	International
10		7000I445	DECAL-LIFT POINT	4	
11		7000A576	DECAL-DANGER	2	Domestic
		700IA576	DECAL-DANGER	2	International
12		296300758	SCREW-HFS-.25-20X2.00-GRI-YZ	1	
13		296300848	NUT-HEXFLGTL-.25-20-G-YZ	1	
14		700IA997	DECAL - GEARBOX POSITION	1	

Rod Loader Arms (S/N 137-) Fig 11-2r01

Illustration No. 296284415



## Rod Loader Arms (S/N 137-) Fig 11-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284416	WELDMENT - UPPER LOADER	1	
2		153752001	SQ HSS-1/2-13X2 ZP	2	
3		75383001	NUT-1/2-UNC GR.8 JAM HEX	2	
4		277154001	BAR - WEAR	2	
5		544012	1/4-20X1 1/4"ELEVATOR BOLT	4	
6		296300848	NUT-HEXFLGTL-.25-20-G-YZ	4	
7		296278741	PLATE - STRIP WEAR	2	
8		235713001	WASHER - FLATSTRL - .38 - .41 X .81 - .06-YA-A325	8	
9		512006	3/8-16X3/4"SOCKET HEAD BOLT	8	
10		157923001	SCREW INSERT , PLASTIC 10MM	12	
11		296284418	WELDMENT - LOADER FRONT	1	
12		296283912	SHIM - ROD LOADER	2	
13		282642001	MAGNET - 1.25" ROD HOLDER	4	
14		296291812	ARM - ROD RETAINER	2	
15		240056001	SCREW-SHSS-.50X.50-.38-16THD-CZ	2	
16		296293900	GEAR - ROD LOADER SLIDER	2	
17		549006	SQ HSS-3/8-16X3/4 PLN	2	
18		250576001	NUT-3/8 NC HEX JAM W/Y-ZINC	2	
19		296300859	SCREW-HFS-.31-18X.50-GR8-YZ	4	
20		485025	WASHER-1/2 FLAT-HARDENED-YZ	2	

Rod Loader Arms (S/N 101-136) Fig 11-2

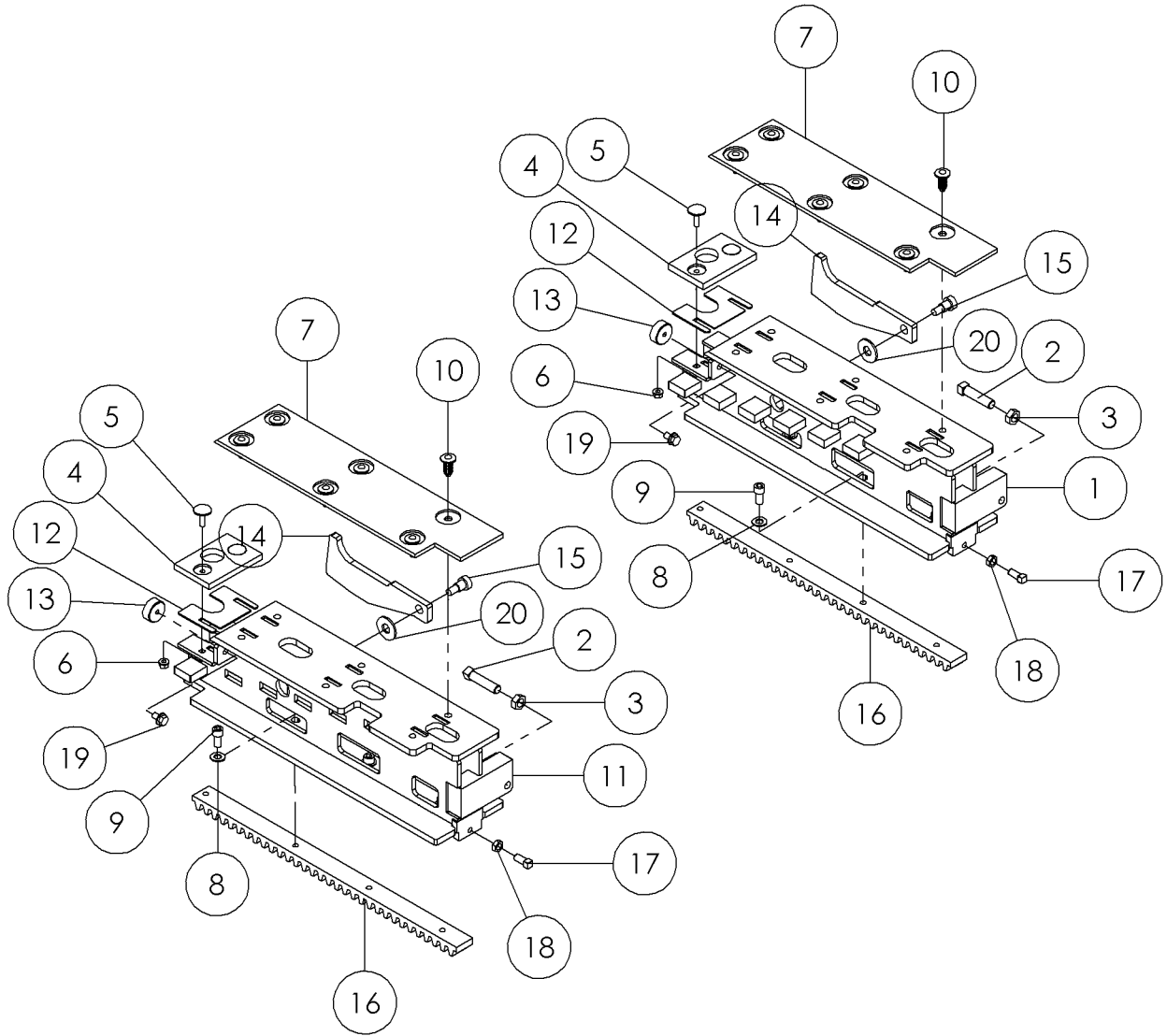
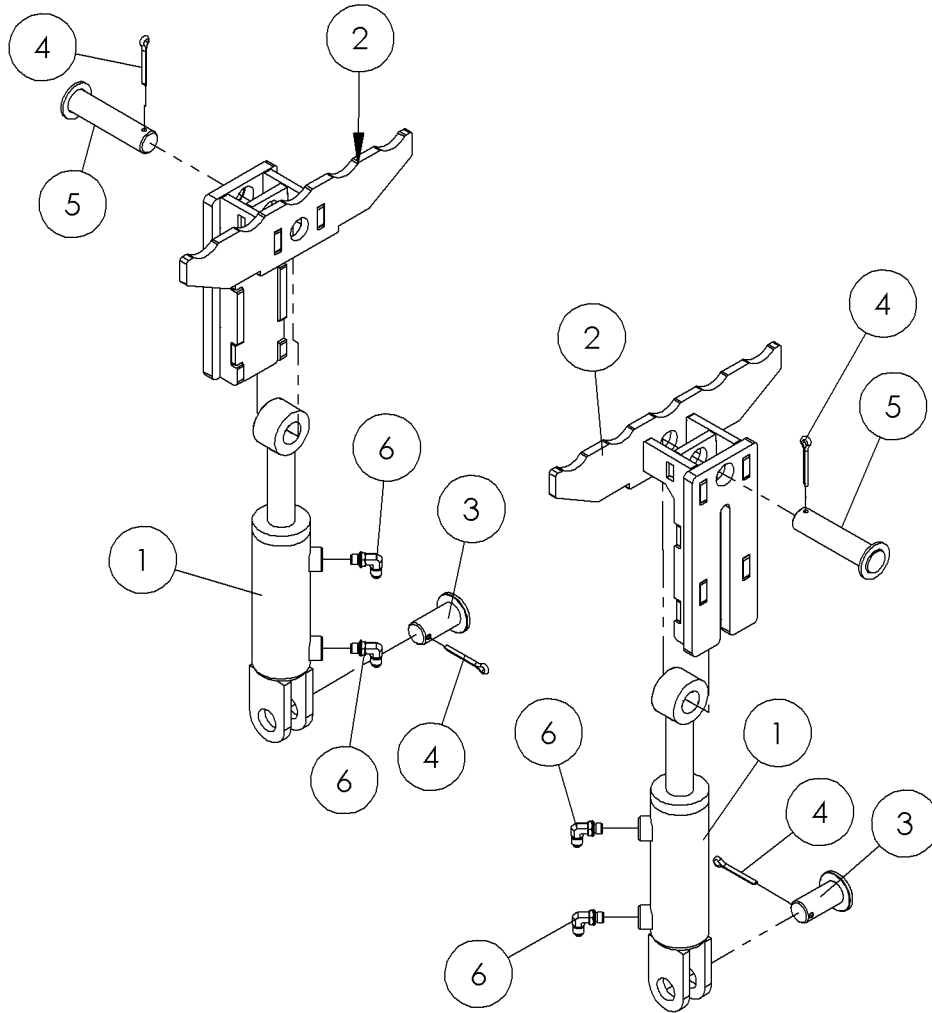


Illustration No. 296284415

## Rod Loader Arms (S/N 101-136) Fig 11-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284416	WELDMENT - UPPER LOADER	1	
2		153752001	SQ HSS-1/2-13X2 ZP	2	
3		75383001	NUT-1/2-UNC GR.8 JAM HEX	2	
4		277154001	BAR - WEAR	2	
5		276477001	BOLT - 1/4-20 X 1 ELEVATOR ZN PLT	4	
6		296300848	NUT-HEXFLGTL-.25-20-G-YZ	4	
7		296278741	PLATE - STRIP WEAR	2	
8		235713001	WASHER - FLATSTRL - .38 - .41 X .81 - .06-YA-A325	8	
9		512006	3/8-16X3/4" SOCKET HEAD BOLT	8	
10		157923001	SCREW INSERT , PLASTIC 10MM	12	
11		296284418	WELDMENT - LOADER FRONT	1	
12		296283912	SHIM - ROD LOADER	2	
13		282642001	MAGNET - 1.25" ROD HOLDER	4	
14		296291812	ARM - ROD RETAINER	2	
15		240056001	SCREW-SHSS-.50X.50-.38-16THD-CZ	2	
16		296293900	GEAR - ROD LOADER SLIDER	2	
17		549006	SQ HSS-3/8-16X3/4 PLN	2	
18		250576001	NUT-3/8 NC HEX JAM W/Y-ZINC	2	
19		296300859	SCREW-HFS-.31-18X.50-GR8-YZ	4	
20		510337611	WASHER - FLATSTD - .50-.56X1.38-.11-YZ	2	

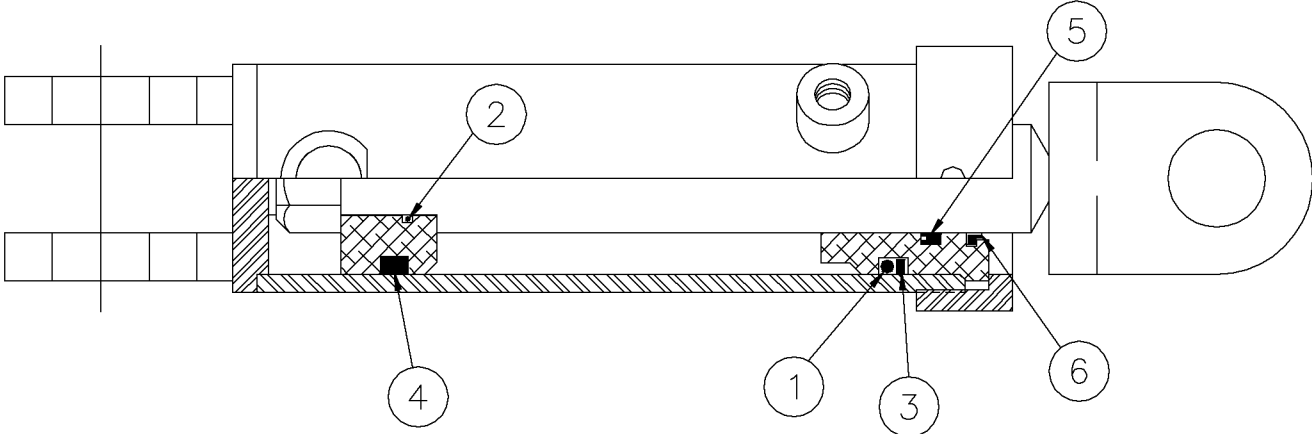
Rod Loader Lift Fig 11-3



Rod Loader Lift Fig 11-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		271765001	CYL-2" BORE X 3" STROKE	2	Breakdown Fig. 11-3
2		296293985	WELDMENT - ROD GUIDE	2	
3		1795015	PIN-1X2 3/8 USEABLE L. 1 3/4"	2	
4		510023	COTTER PIN-3/16" X 1 3/4" REF T07268	4	
5		228061001	PIN-TILT	2	
6		59423001	FIT-4M JICX4M ADJ.90 DEG.ELBOW	4	

Components-Lift Cylinder Fig 11-3z01





## Components-Lift Cylinder Fig 11-3z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	WEAR RING	1	Not Sold Sparately
2		NSS	PSP SEAL	1	Not Sold Sparately
3		NSS	O-RING	1	Not Sold Sparately
4		NSS	O-RING	1	Not Sold Sparately
5		NSS	BACKUP	1	Not Sold Sparately
6		NSS	ROD SEAL	1	Not Sold Sparately
7		NSS	WEAR RING	1	Not Sold Sparately
8		NSS	DUST SEAL	1	Not Sold Sparately
		271765003	REPAIR KIT FOR 271765001 CYLINDER		Inc. Items 1-8
		271765001	CYL-2" BORE X 3" STROKE		Inc. All Items In Figure

Rod Loader Valve Fig 11-4r01

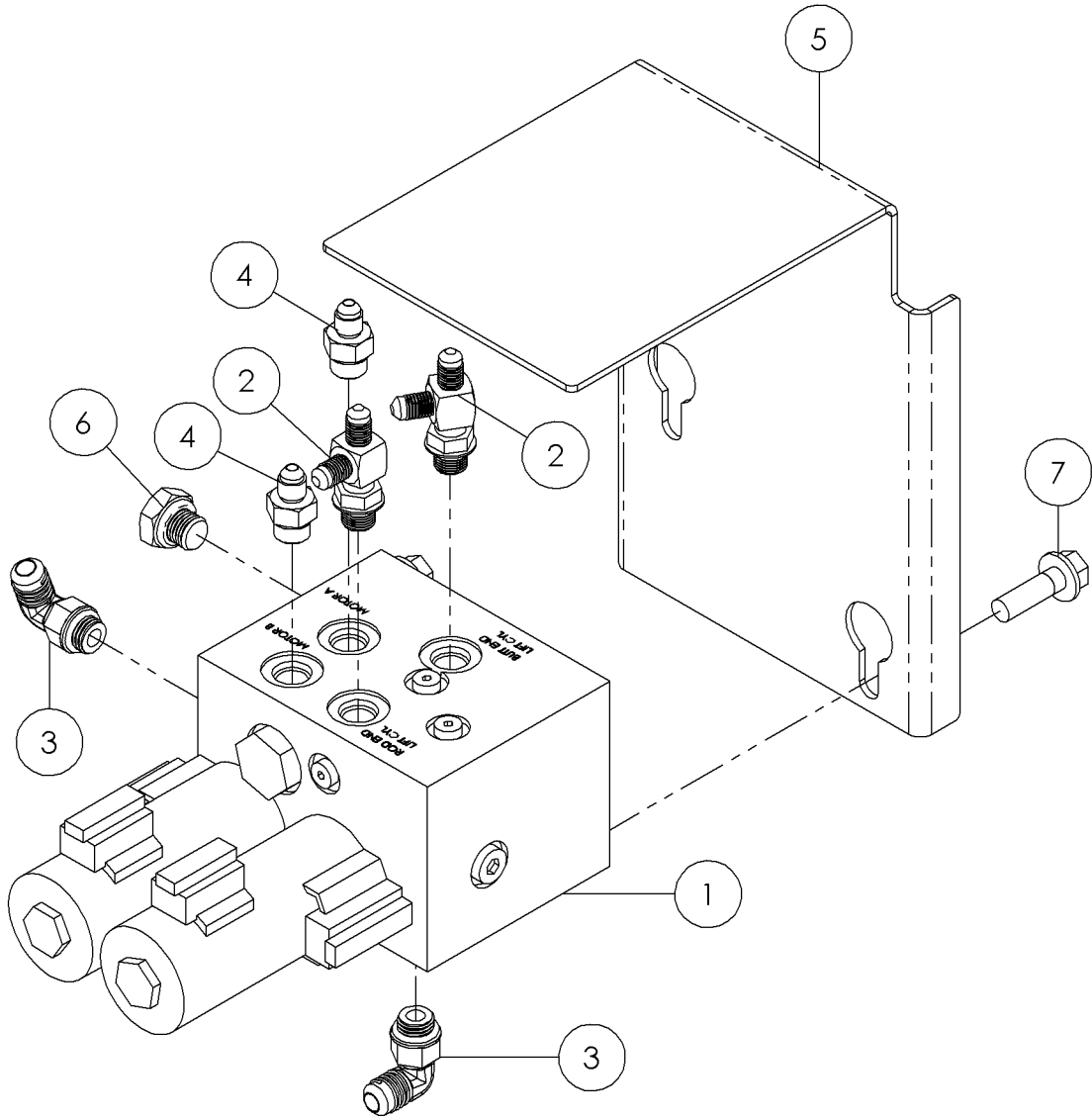
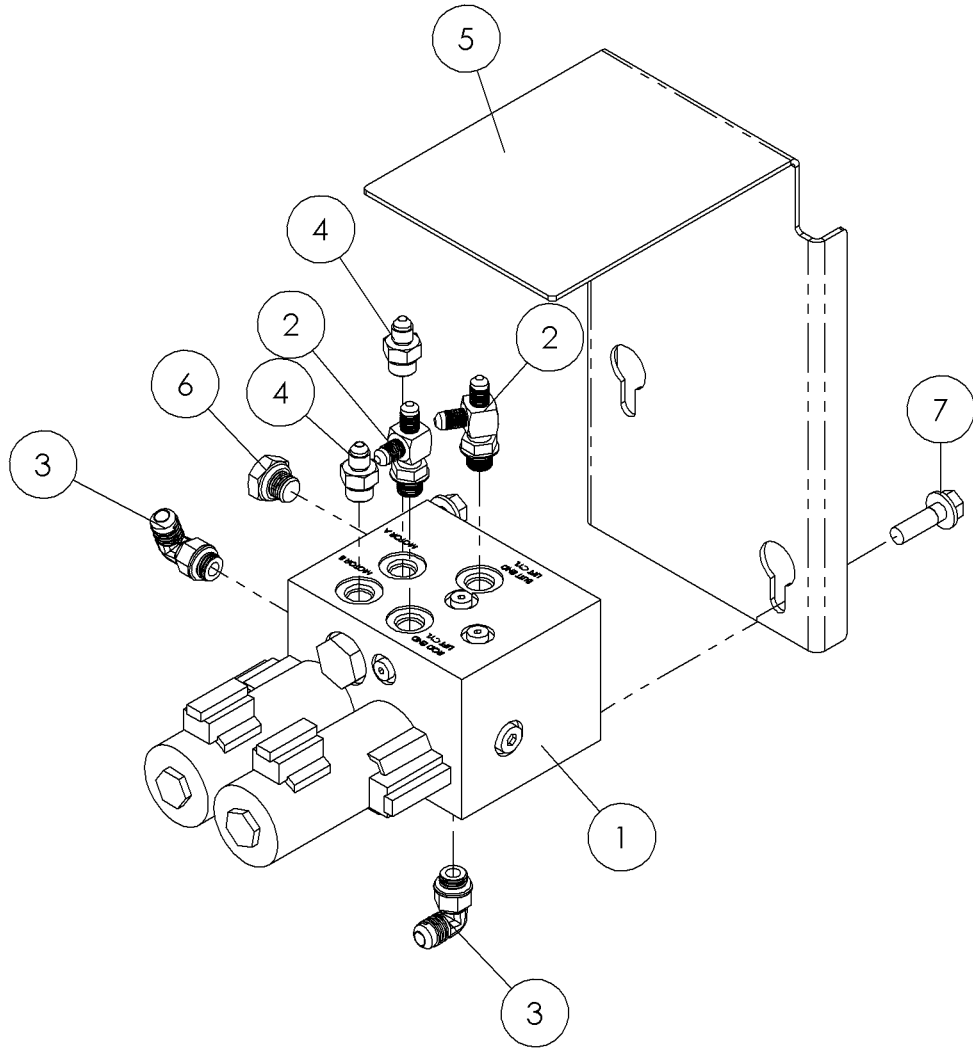


Illustration No. 296291808

## Rod Loader Valve Fig 11-4r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		296284305	MANIFOLD-ROD LOADER	1	Breakdown Fig. 11-4a
2		82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	2	
3		59426001	FITTING - 90-6MJ-6MORBA	2	
4		57968001	FITTING-STR-4MJ-6MORB	2	
5	*	296291964	SHIELD - ROD LOADER	1	
6		5553001	FITTING - PLUG - 6MORB - HEX	1	
7		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	2	

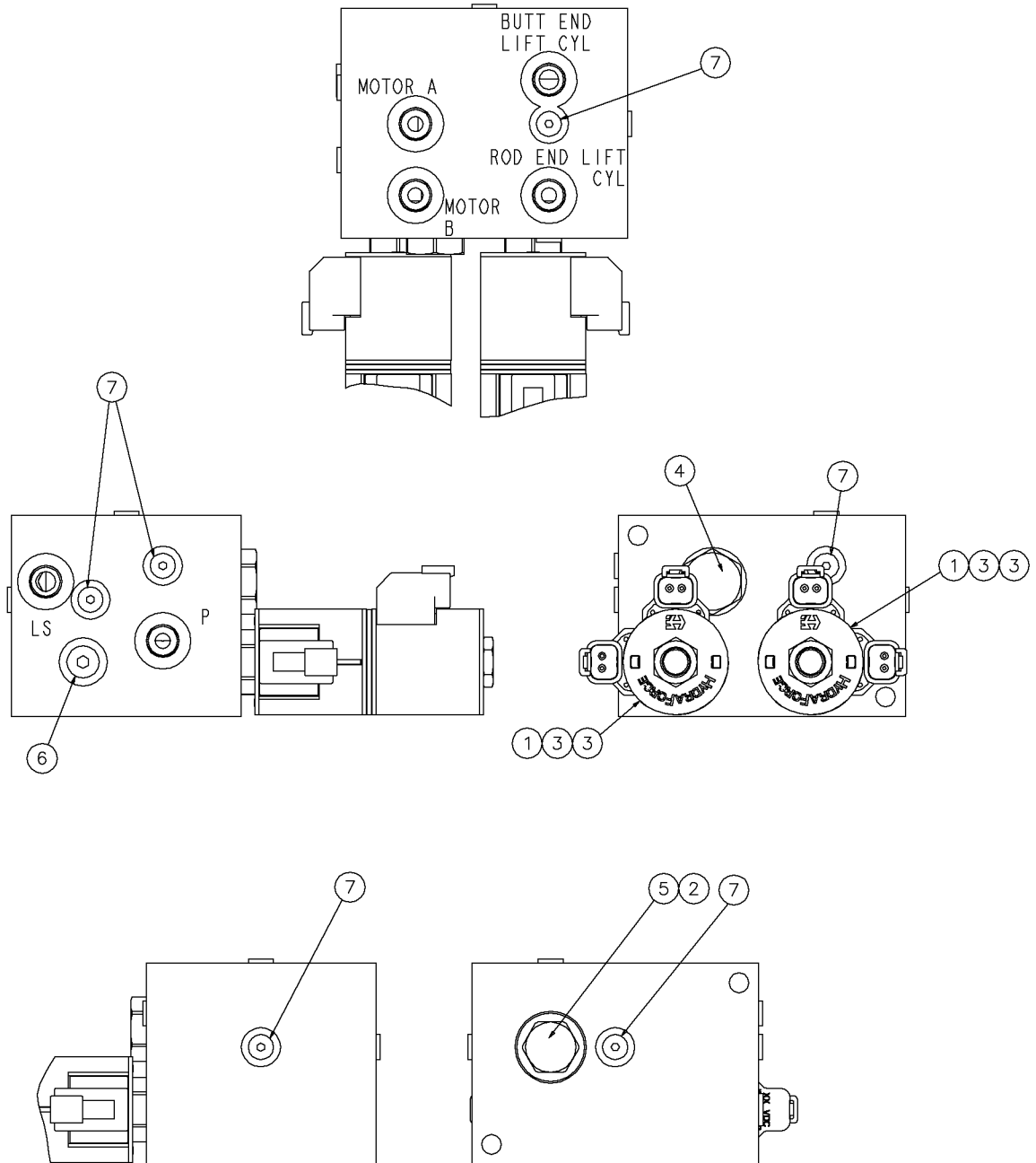
Rod Loader Valve Fig 11-4



## Rod Loader Valve Fig 11-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296284305	MANIFOLD-ROD LOADER	1	Breakdown Fig. 11-4a
2		82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	2	
3		59426001	FITTING - 90-6MJ-6MORBA	2	
4		57968001	FITTING-STR-4MJ-6MORB	2	
5		296291809	SHIELD - ROD LOADER	1	
6		5553001	FITTING - PLUG - 6MORB - HEX	1	
7		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	2	

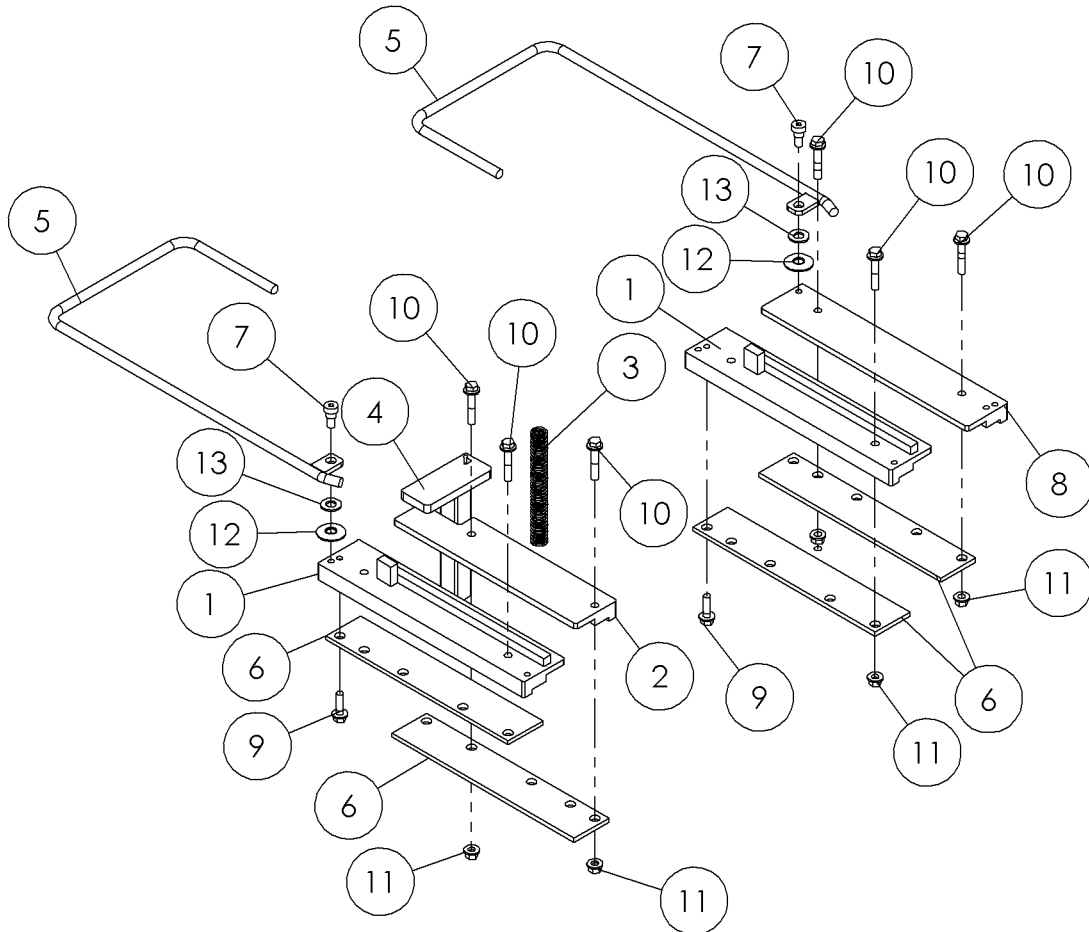
Components-Rod Loader Valve Fig 11-4z01



## Components-Rod Loader Valve Fig 11-4z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296271086	SOLENOID VALVE	2	
		296265599	SEAL KIT	2	
2		246415003	PILOT PISTON	1	
3		296271077	COILS	4	
4		296276754	LOAD SENSE VALVE	1	
		296276755	SEAL KIT	1	
5		296276779	CHECK VALVE	1	
		296265595	SEAL KIT	1	
6		240324011	PLUG-SAE	1	
7		240324015	PLUG-SAE	6	
		296284305	MANIFOLD-ROD LOADER		Inc. All Items In Figure.

Rod Loader Hold Down Fig 11-5





## Rod Loader Hold Down Fig 11-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296293943	WELDMENT-COVER PLATE	2	
2		296293945	BAR-ROD LOADER HOLD DOWN	1	
3		296283300	SPRING - .859 OD X 9.00	1	
4		296293891	ROW SELECTER ARM	1	
5		296293895	ARM-SAFETY GUARD	2	
6		296293944	PLASTIC - NYLON SLIDE	4	
7		296256038	SCREW - SHSS - .50X.38-.38-16 THD-CZ	2	
8		296293942	BAR-ROD LOADER HOLD DOWN	1	
9		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	2	
10		296300776	SCREW-HFS-.38-16X2.00-GR8-YZ	6	
11		296300850	NUT-HEXFLGTL-.38-16-G-YZ	5	
12		63471001	WASHER-SPRING 1/2"IDX.070	2	
13		485025	WASHER-1/2 FLAT-HARDENED-YZ	2	

Rod Loader Motor Fig 11-6

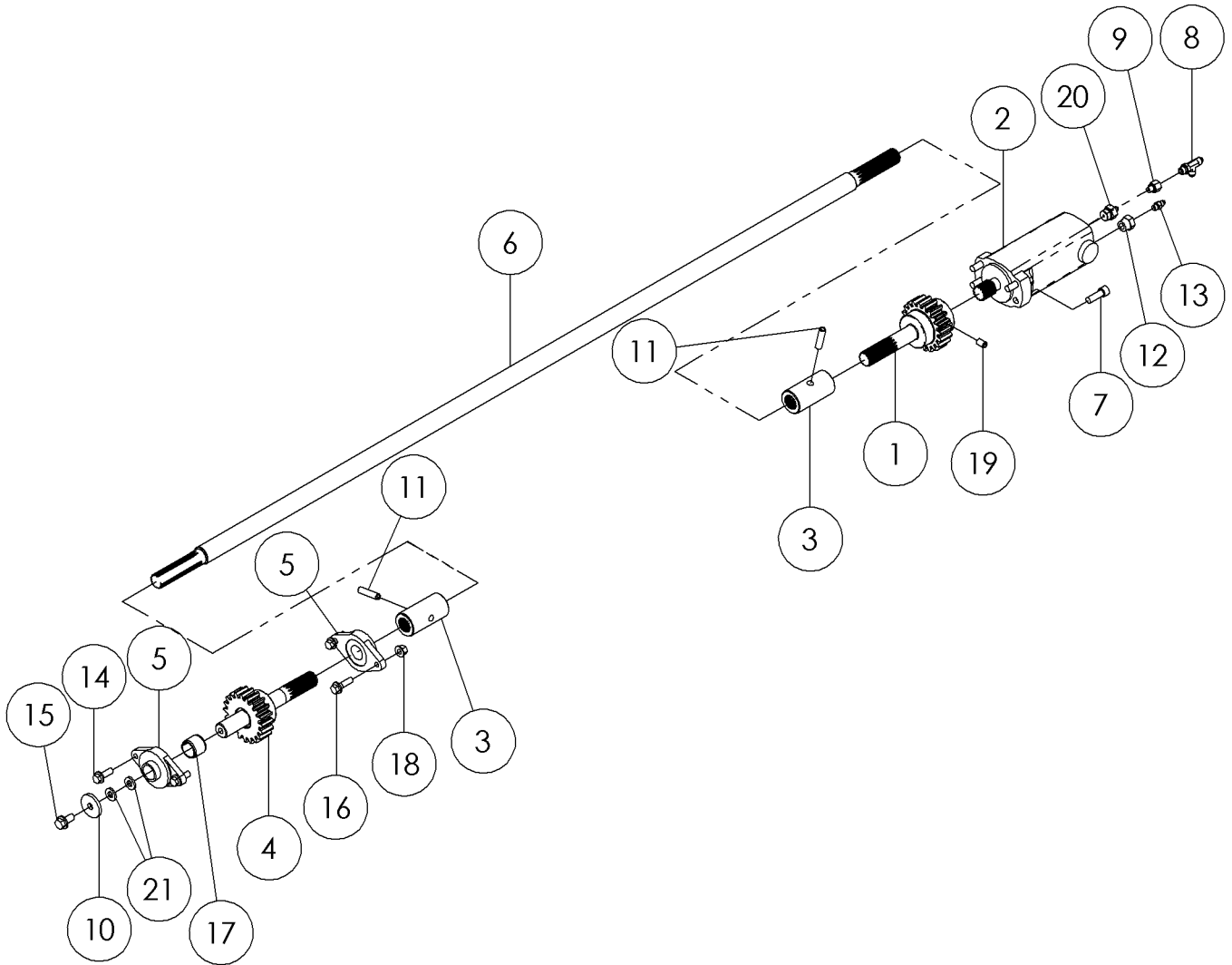
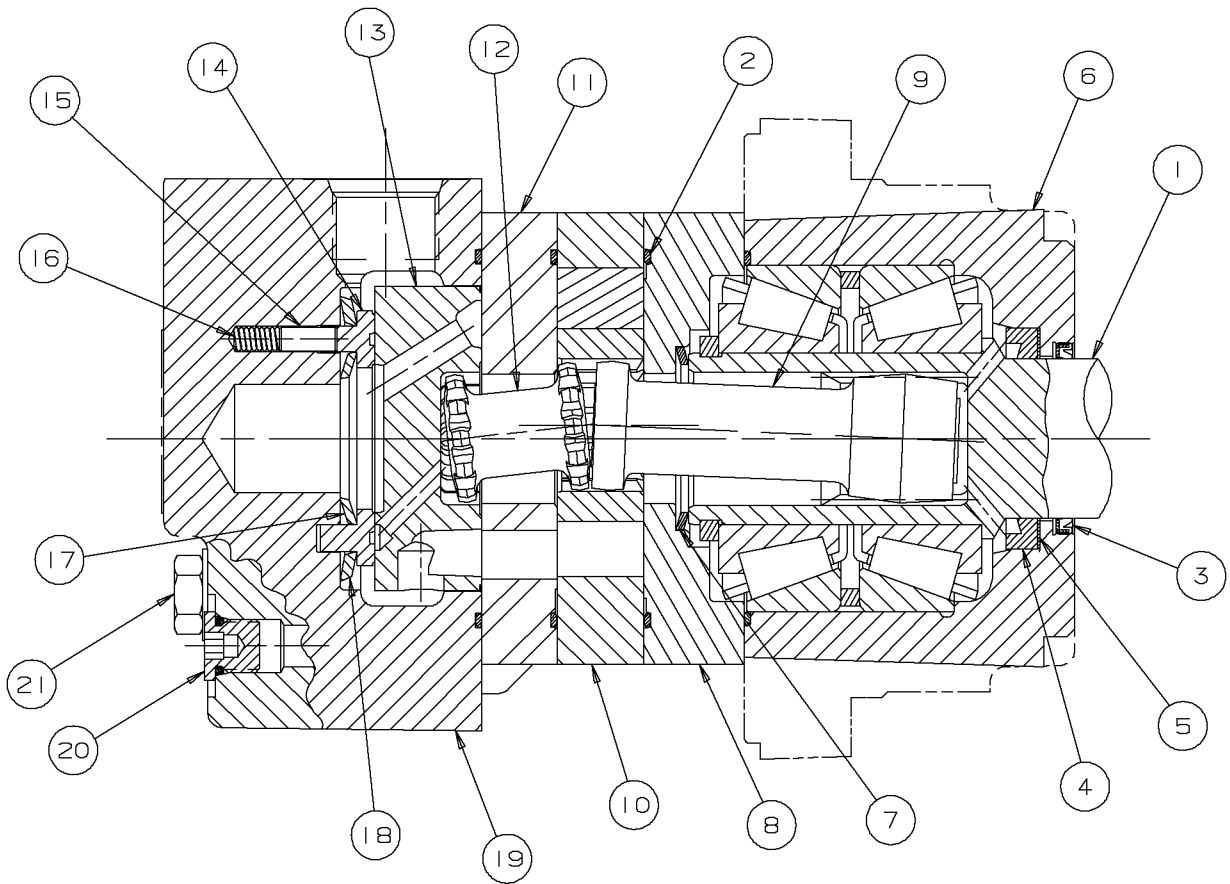


Illustration No. 296293911

## Rod Loader Motor Fig 11-6

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration & Parts List.
1		296269732	GEAR - SPINED FRONT ROD LOADER GEAR	1	
2		296284323	MOTOR-HYD 14.9 CID SPLINE	1	Breakdown Fig. 11-6a
3		296287853	HUB - 1.25 14T SPLINE	2	
4		296269731	GEAR - SPLINED REAR ROD LOADER	1	
5		246416001	BEARING- 2 BOLT FLANGE	2	
6		296293904	SPLINE SYNCRO TUBER	1	
7		276402001	SCREW-1/2-13X1 1/2 SHC Y ZINC	4	
8		68774001	FITTING-6MX6M JIC (RUN)X6M JIC	1	
9		88530001	FITTING-4MORB X 6FORB SOLID REDUCER	1	
10		281787001	SLUG -.53 ID X 2.00 OD - 1/4"	1	
11		296287915	1/2 X 2" ROLL PIN	2	
12		108484001	FITTING - STR - 10MORB - 4FORB	1	
13		236488001	FITTING-4MOR X 4 MJIC R.047	1	
14		296300781	SCREW-HFS-.44-14X1.25-GR8-YZ	2	
15		296300788	SCREW-HFS-.50-13X1.00GR8-YZ	1	
16		296300782	SCREW-HFS-.44-14X1.50-GR8- YZ	2	
17		1835085	BUSHING-STL.1 1/2X1 1/4-1 1/4	1	
18		296300883	NUT-HEXFLGTL-.44-14-G-YZ	2	
19		68837003	SCREW-1/2-13X3/4 SOCKET SET	1	
20		101507001	FITTING-10MORX4MJIC STR.	1	
21	*	127362001	WASHER-1/2 HARD.FLAT/PLATED	2	

Components-Rod Loader Motor Fig 11-6z01



## Components-Rod Loader Motor Fig 11-6z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		206469001	SHAFT&BEARING KIT/1 1/4SPLINED	1	
2		296271200	O-RING	4	
3		770071	SEAL-DUST	1	
4		61062001	SHAFT SEAL	1	
5		260576013	WASHER-BACKUP	1	
6		246413003	HOUSING - 4 BOLT MAGNET	1	
7		770017	SEAL-SHAFT FACE 9050	1	
8		770079	PLATE-WEAR # 21623	1	
9		243316009	DRIVE	1	
10		243316011	GEROLER SUB-ASSEMBLY	1	
11		510503701	PLATE, VALVE - #22134-000	1	
12		774011	DRIVE-VALVE 8433	1	
13		770087	VALVE	1	
14		770089	PLATE-BALANCE	1	
15		296302282	PIN	2	
16		243316025	SPRING	2	
17		770057	SEAL-FACE INNER	1	
18		770091	SEAL-FACE OUTER	1	
19		296285238	HOUSING-VALVE	1	
20		180005760	PLUG - SUB ASSY	1	
21		771017	BOLT- # 14384-010	4	
		296284322	PLATE - FUEL SUPPORT SIDE	1	Inc. All Items In Figure.
		296285069	SEAL KIT		

Gearbox Indicator (S/N 123-) Fig 11-7r01

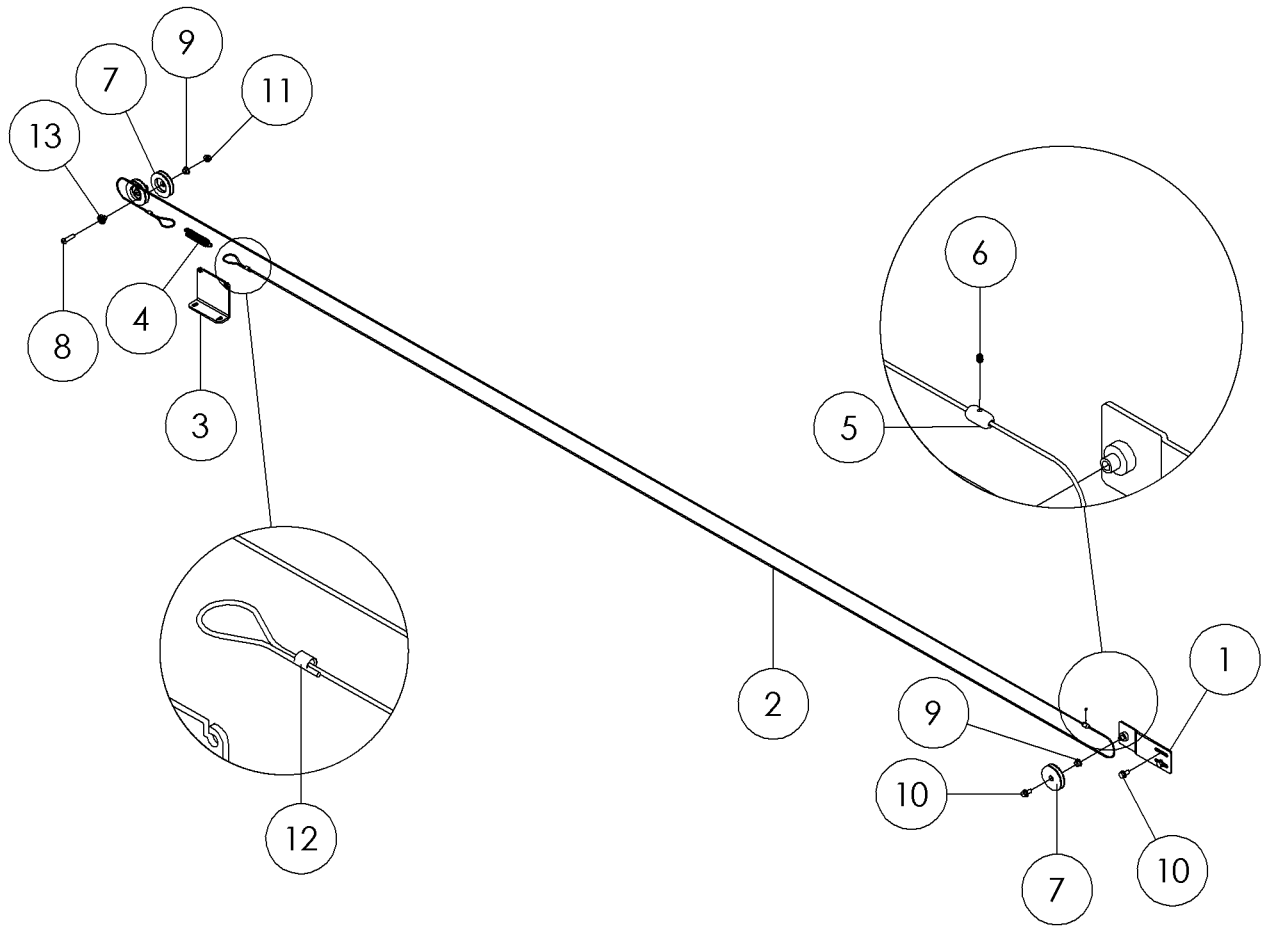
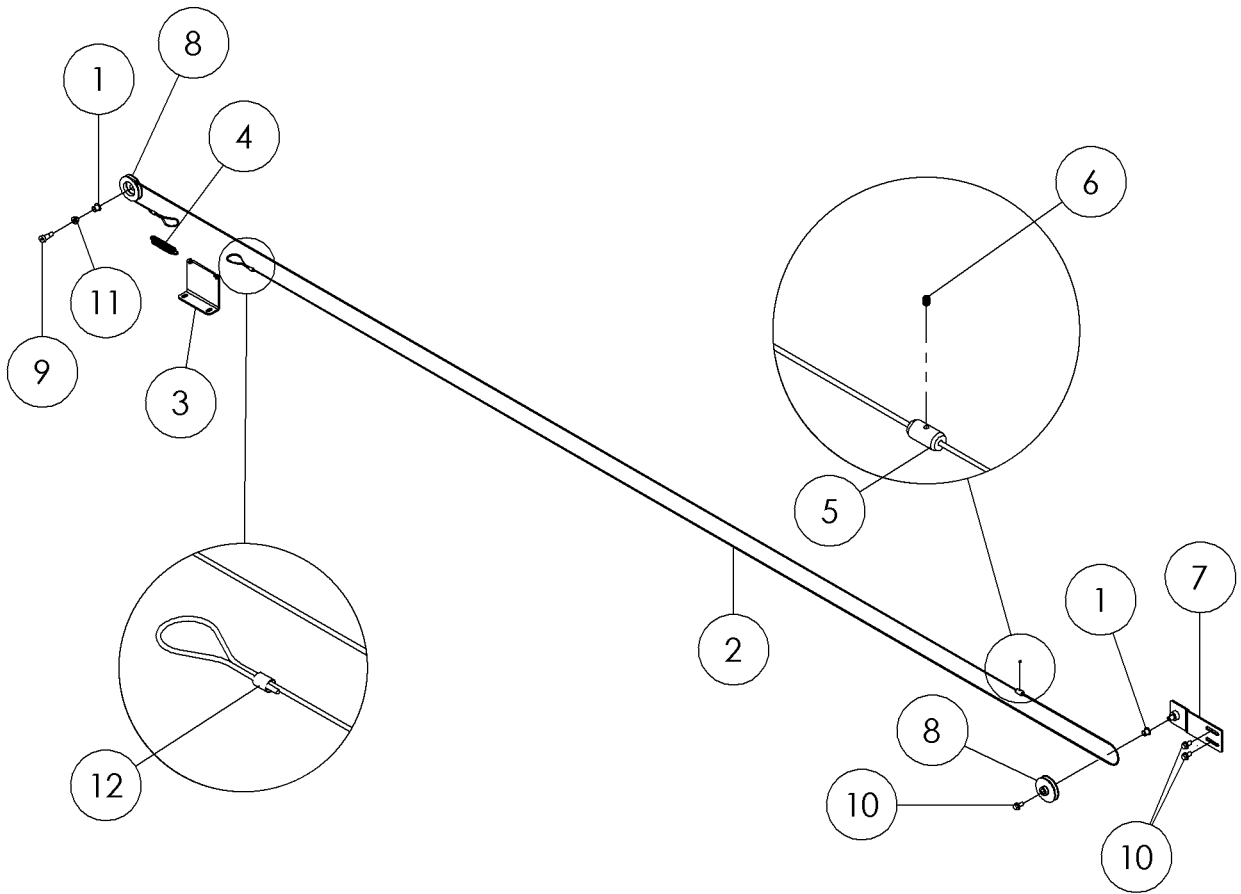


Illustration No. 296293966

## Gearbox Indicator (S/N 123-) Fig 11-7r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Add Missing bubbles.
1		296293963	ROLLER MOUNT WELDMENT	1	(SN 123-)
2		296293961	CABLE - NCS - C - COATED	1	
3		296293960	PLATE - MOUNT GEARBOX INDICATOR	1	
4		1789013	SPRING -EXT. #76 4" OA	1	
5		296293969	RD - MARKER	1	(SN 123-)
6		94207001	SSS- 8-32X1/4	1	
7		296293959	RD - ROLLER	3	(SN 123-)
8		79970003	SCREW-BUTTON HD CAP#810-00-115	2	
9		296296180	BUSHING - 5/8 OD X 1/2 ID .38 BRONZE FLANGE	3	
10		296300771	SCREW-HFS-..38-16X.75GR8-YZ	3	
11		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	
12		296293987	CONNECTOR - 6GA PARALLEL	2	
13		296296181	ROUND - SPACER	2	

Gearbox Indicator (S/N 101-122) Fig 11-7





## Gearbox Indicator (S/N 101-122) Fig 11-7

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	November, 2007		Update In Illustration.
1		254983001	BUSHING-5/8 OD X 1/2 ID-.63 BRONZE STEP	2	
2		296293961	CABLE - NCS - C - COATED	1	
3		296293960	PLATE - MOUNT GEARBOX INDICATOR	1	
4		1789013	SPRING -EXT. #76 4" OA	1	
5		296293969	RD - MARKER	1	
6		94207001	SSS- 8-32X1/4	1	
7		296293963	ROLLER MOUNT WELDMENT	1	
8		296293959	RD - ROLLER	2	
9		292146001	SCREW - SHSS - .50 X .75 - .38 - 16THD - CZ	1	
10		296300771	SCREW-HFS-.38-16X.75GR8-YZ	3	
11		296300850	NUT-HEXFLGTL-.38-16-G-YZ	1	
12		296293987	CONNECTOR 6GA. PARALLEL	2	

Row Selector Fig 11-8r02

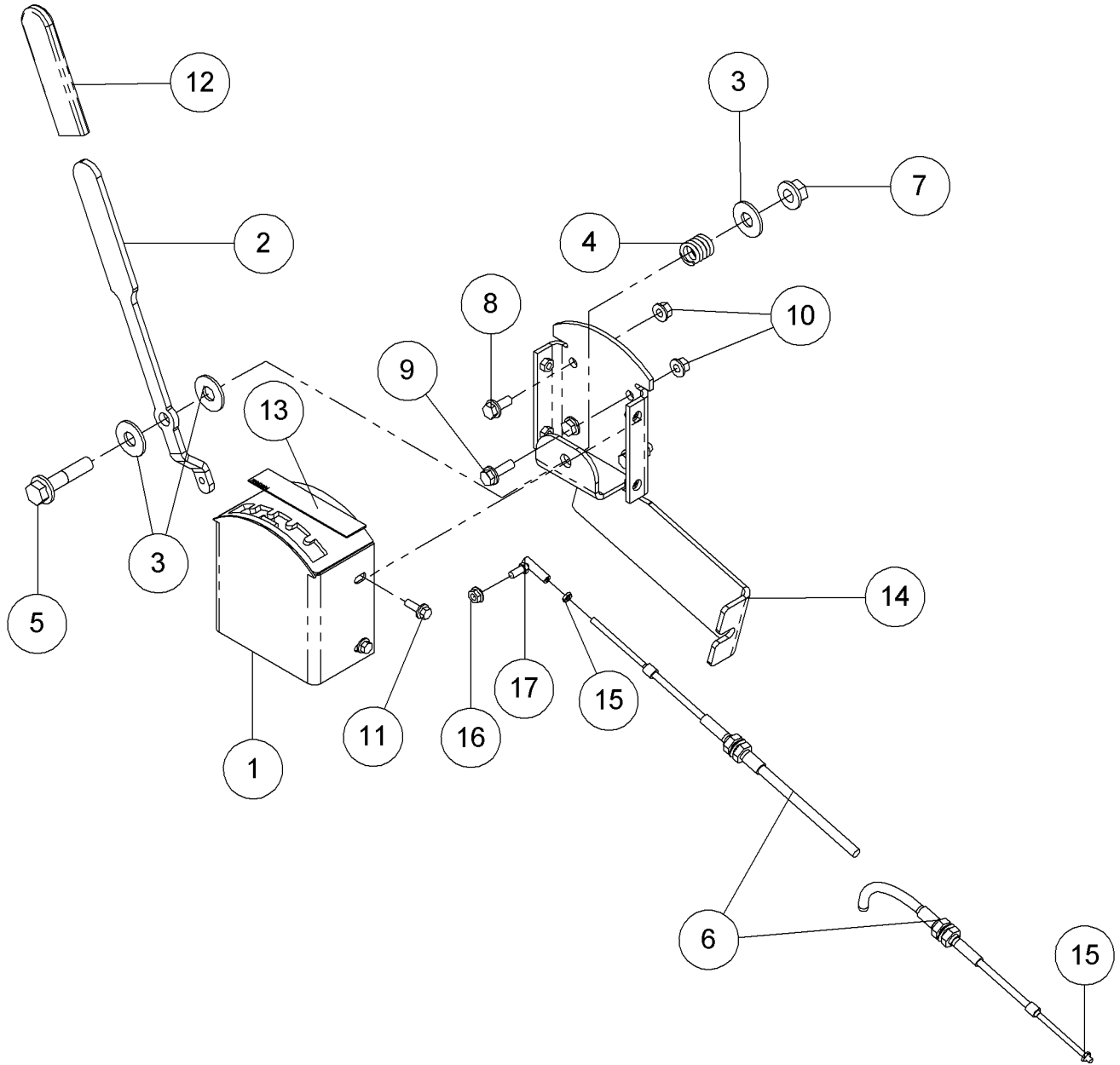


Illustration No. 296294098

## Row Selector Fig 11-8r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	March, 2008		Update In Illustration & Parts List.
1		296289011	WELDMENT - HANDLE COVER	1	
2		296294146	PLATE - HANDLE	1	
3		510337611	WASHER-FLATSTD-.50-.56X1.38-.11-YZ	3	
4		285776001	SPRING - COMP #49 1.00 O.A.	1	
5		296300793	SCREW-HFS-.50-13X2.25-GR8-YZ	1	
6		278278001	CABLE-313-VTT-3-118 CONTROL	1	
7		296300851	NUT-HEXFLGTL-.50-13-G-YZ	1	
8		296300762	SCREW-HFS-.31-18X.75-GR8-YZ	2	
9		296300763	SCREW-HFS-.31-18X1.00-GR8-YZ	2	
10		296300849	NUT-HEXFLGTL-.31-18-G-YZ	4	
11		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	4	
12		258768001	HANDLE-PLASTIC (YELLOW)	1	
13		700ID254	DECAL - ROW SELECTOR	1	
14		296294099	WELDMENT-HANDLE BASE MOUNT D20X22II	1	
15		26692001	NUT-10-32 NF HEX	2	
16	*	296300892	NUT-HEXFLG-.25-28-GR8-YZ	1	
17	*	67271001	175-403-005 BALL JOINT	1	

Row Selector Fig 11-8r01

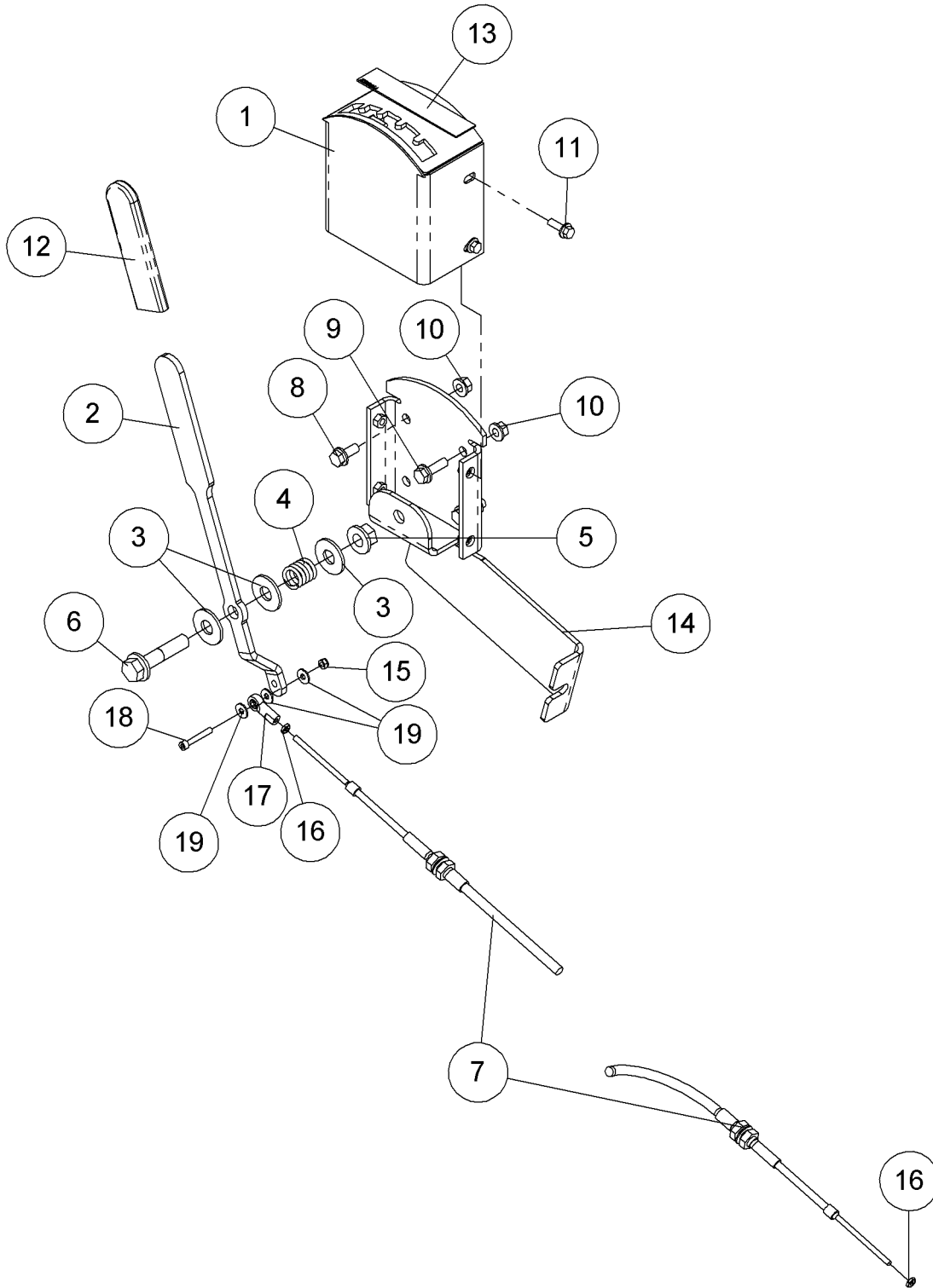


Illustration No. 296294098

## Row Selector Fig 11-8r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	January, 2008		Update In Illustration.
1		296289011	WELDMENT - HANDLE COVER	1	
2		296294146	PLATE - HANDLE	1	
3		510337611	WASHER - FLATSTD - .50-.56X1.38-.11-YZ	3	
4		285776001	SPRING - COMP #49 1.00 O.A.	1	
5		296300851	NUT-HEXFLGTL-.50-13-G-YZ	1	
6		296300793	SCREW-HFS-.50-13X2.25-GR8-YZ	1	
7		278278001	CABLE-313-VTT-3-118 CONTROL	1	
8		296300762	SCREW-HFS-.31-18X.75-GR8-YZ	2	
9		296300763	SCREW-HFS-.31-18X1.00-GR8-YZ	2	
10		296300849	NUT-HEXFLGTL-.31-18-G-YZ	4	
11		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	4	
12		258768001	HANDLE-PLASTIC (YELLOW)	1	
13		700id254	DECAL - ROW SELECTOR	1	Domestic/International
14		296294099	WELDMENT - HANDLE BASE MOUNT D20X22II	1	
15		99042001	NUT - NYLOCK - 10 - 24 - GR2 - CZ	1	
16		26692001	NUT-10-32 NF HEX	2	
17		79504001	BALL JOINT#10-32 .189/.191 EYE	1	
18		125659001	SCREW-10-24 X 1 1/4 SOC HD CAP	1	
19		510337601	WASHER-FLATSTD-.19-.22X.56-.05-YZ	3	

Row Selector Fig 11-8

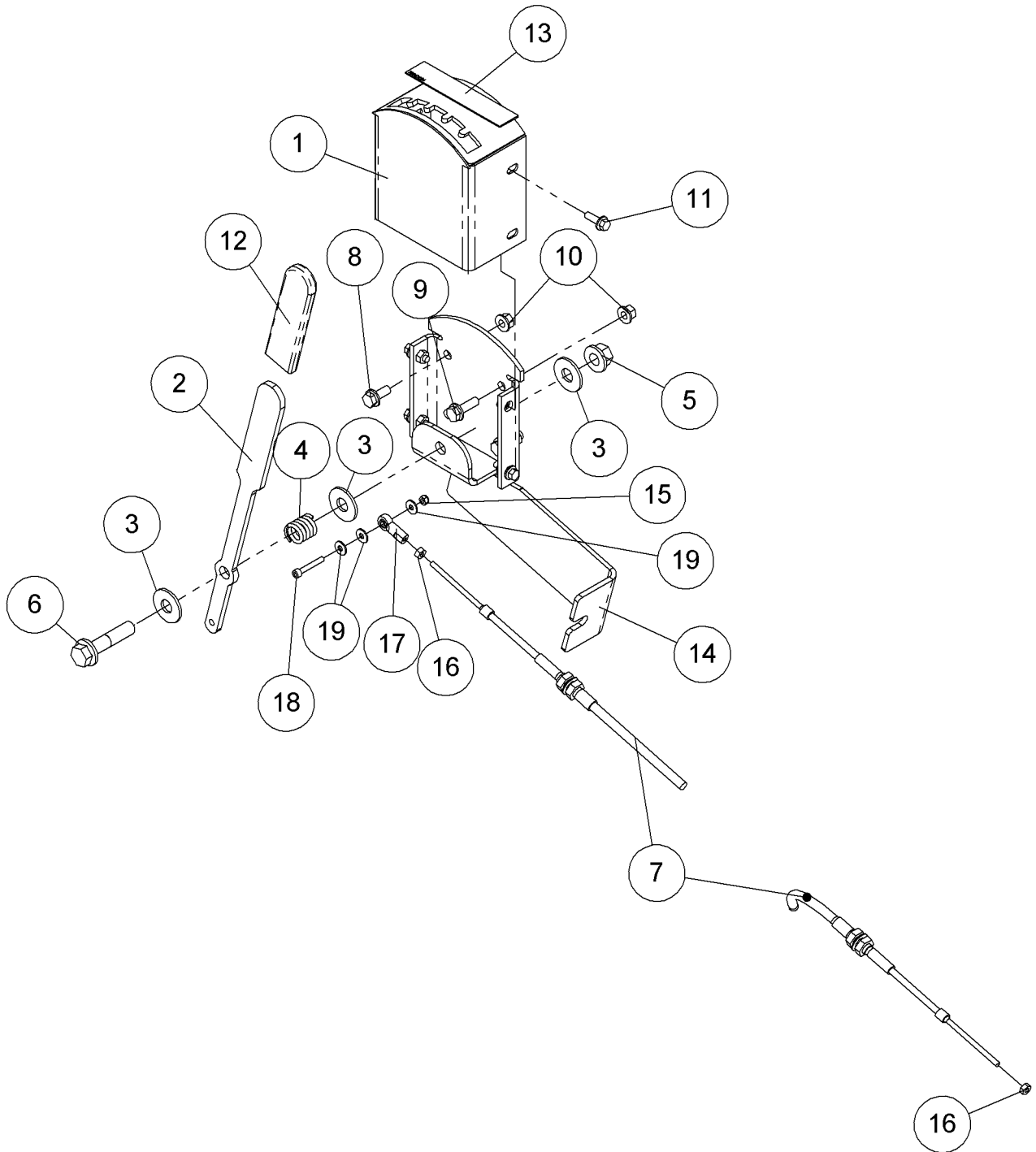


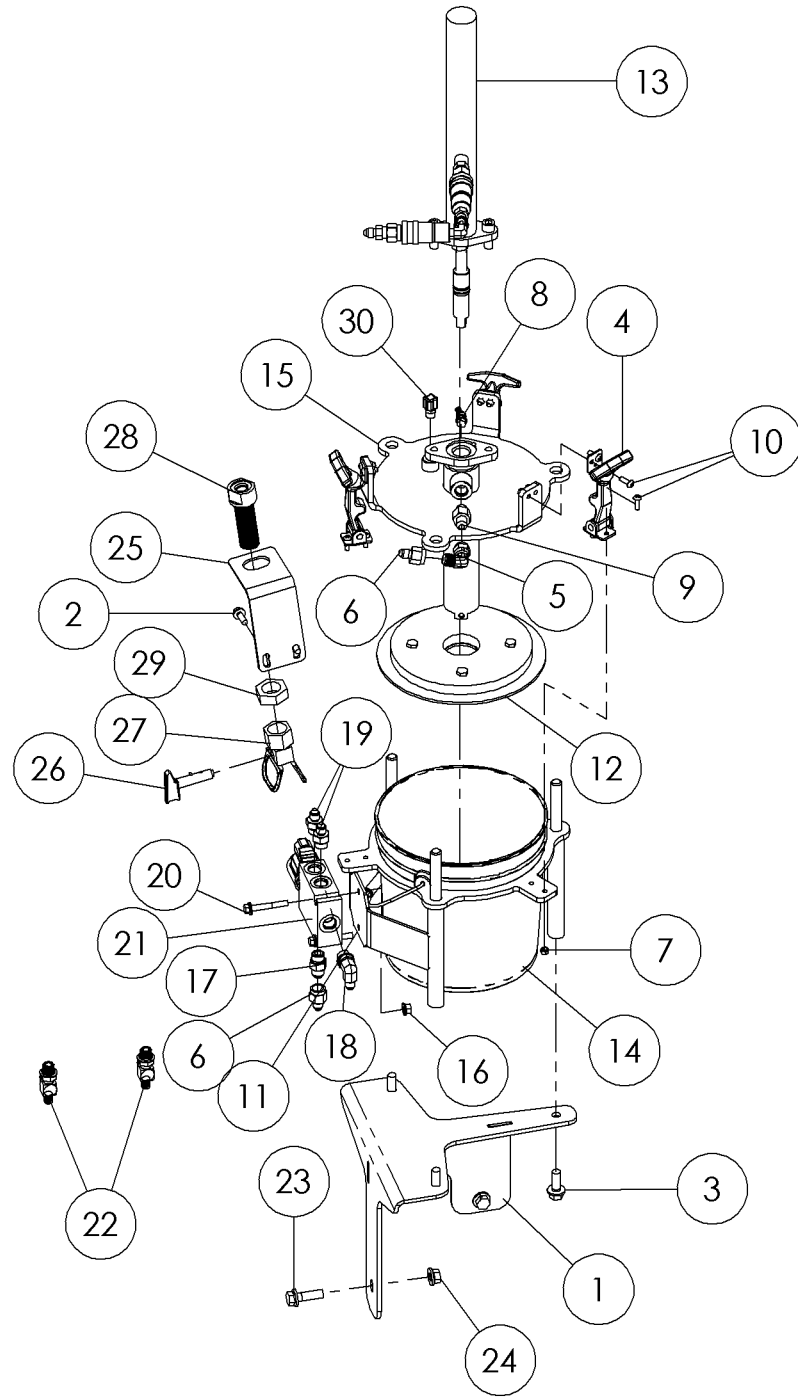
Illustration No. 296294098

## Row Selector Fig 11-8

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296289011	WELDMENT - HANDLE COVER	1	
2		296294146	PLATE - HANDLE	1	
3		510337611	WASHER - FLATSTD - .50-.56X1.38-.11-YZ	3	
4		285776001	SPRING - COMP #49 1.00 O.A.	1	
5		296300851	NUT-HEXFLGTL-.50-13-G-YZ	1	
6		296300793	SCREW-HFS-.50-13X2.25-GR8-YZ	1	
7		278278001	CABLE-313-VTT-3-118 CONTROL	1	
8		296300762	SCREW-HFS-.31-18X.75-GR8-YZ	2	
9		296300763	SCREW-HFS-.31-18X1.00-GR8-YZ	2	
10		296300849	NUT-HEXFLGTL-.31-18-G-YZ	4	
11		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	4	
12		258768001	HANDLE-PLASTIC (YELLOW)	1	
13		700ID254	DECAL - ROW SELECTOR	1	Domestic/International
14		296294099	WELDMENT - HANDLE BASE MOUNT D20X22II	1	
15		99042001	NUT - NYLOCK - 10 - 24 - GR2 - CZ	1	
16		400001	NUT-3/16 NC HEX REF T09423	2	
17		79504001	BALL JOINT#10-32 .189/.191 EYE	1	
18		125659001	SCREW-10-24 X 1 1/4 SOC HD CAP	1	
19		510337601	WASHER-FLATSTD-.19-.22X.56-.05-YZ	3	

Bucket Auto Greaser Mount (S/N 267-) Fig 11-9r01

Illustration No. 296299064





## Bucket Auto Greaser Mount (S/N 267-) Fig 11-9r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306286	WELDMENT - GREASER MOUNT	1	
2		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
3		296300772	SCREW-HFS-.38-16X1.00-GR8-YZ	3	
4		109591001	LATCH-4" RUBBER T HANDLE	3	
5		60851001	FITTING-6M JICX6FS JIC 90ELBOW	1	
6		59928001	6F JICX4M JIC ST REDUCER	2	
7		99042001	NUT - NYLOCK - 10 - 24 - GR2 - CZ	12	
8		588001	ZERK-1/8" NPT 45 DEG GREASE	1	
9		296280727	FITTING-CHECK VALVE-6MORX6MJIC-40PSI	1	
10		233502001	SCREW- #10-24X5/8 PHILLIPS PAN	12	
11		296289052	WELD - BUCKET SUPPORT	1	
12		296303104	GREASE FOLLOWER	1	Breakdown Fig. 11-9z01
13		296303115	CYLINDER - AUTO GREASER	1	Breakdown Fig. 11-9z02
14		235983001	LUBRICANT - THREAD 1 GALLON	1	
15		296303050	GREASER TOP	1	
16		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
17		251575001	VALVE-CHECK 6MORB 6MJIC INLINE	1	
18		57950001	FITTING - 90-6MORBA-4MJ	1	
19		131009001	FITTING-4MJICX6MORING ST.062R	2	
20		296300757	SCREW-HFS-.25-20X1.75-GR8-YZ	2	
21		294901001	VALVE - GREASER	1	Breakdown Fig. 11-9z03
22		82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	2	
23		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	2	
24		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	
25		296303134	*MOUNT - NOZZLE	1	
26		296303135	SPRAY TIP	1	
27		296303136	GUARD TIP	1	
28		296303130	BAR - NOZZLE MOUNT	1	
29		284562001	NUT, HEX JAM - .88 - 14 - GR5 - YZ	1	
30		599001	BREATHER VENT-1/8 NPT 131000	1	

Bucket Auto Greaser Mount (S/N 101-266) Fig 11-9

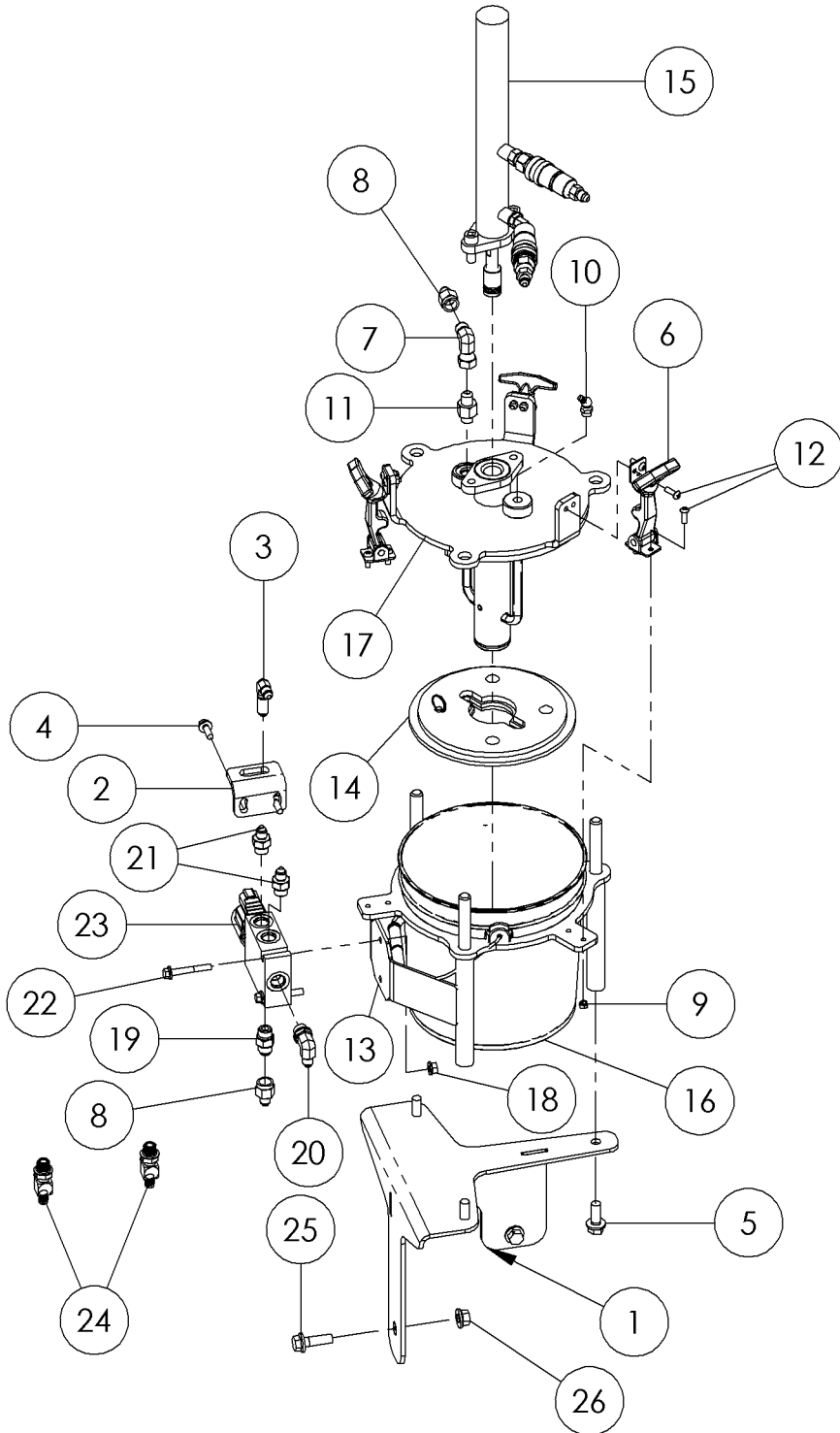


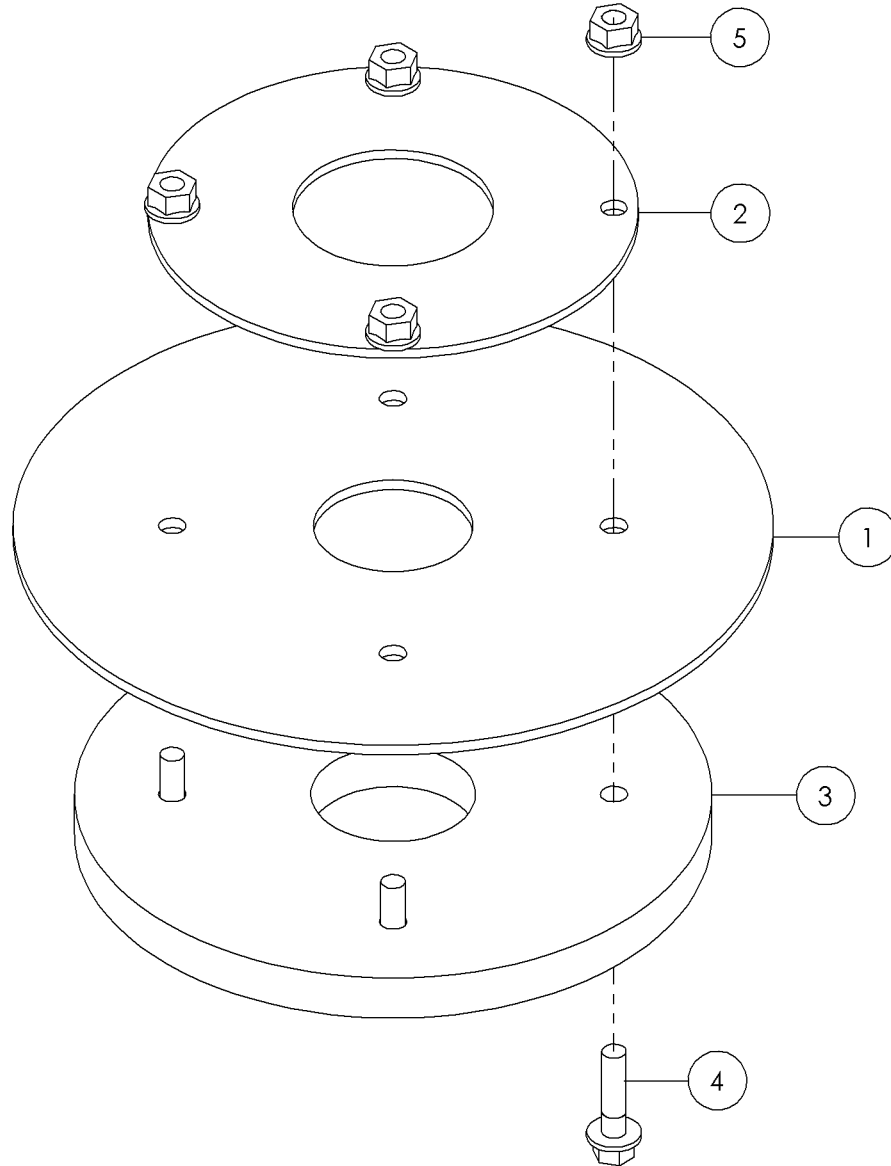
Illustration No. 296299064

## Bucket Auto Greaser Mount (S/N 101-266) Fig 11-9

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306286	WELDMENT - GREASER MOUNT	1	
2		296266585	BLOCK - NOZZLE	1	
3		61497001	FITTING-4M JIC BULKHEAD 90DEG.	1	
4		296300753	SCREW-HFS-.25-20X.75-GR8-YZ	2	
5		296300772	SCREW-HFS-..38-16X1.00-GR8-YZ	3	
6		109591001	LATCH-4" RUBBER T HANDLE	3	
7		60851001	FITTING-6M JICX6FS JIC 90ELBOW	1	
8		59928001	6F JICX4M JIC ST REDUCER	2	
9		99042001	NUT - NYLOCK - 10 - 24 - GR2 - CZ	12	
10		588001	ZERK-1/8" NPT 45 DEG GREASE	1	
11		296280727	FITTING-CHECK VALVE-6MORX6MJIC-40PSI	1	
12		233502001	SCREW- #10-24X5/8 PHILLIPS PAN	12	
13		296289052	WELD - BUCKET SUPPORT	1	
14		296287954	ASSEMBLY - GREASER FOLLOWER (1 GAL.	1	Breakdown Fig. 11-9a
15		296287960	CYLINDER - AUTO GREASER	1	Breakdown Fig. 11-9b
16		235983001	LUBRICANT - THREAD 1 GALLON	1	
17		296287952	WELDMENT - GREASE BUCKET TOP	1	
18		296300848	NUT-HEXFLGTL-.25-20-G-YZ	2	
19		251575001	VALVE-CHECK 6MORB 6MJIC INLINE	1	
20		57950001	FITTING-90-4MJ-6MORBA	1	
21		131009001	FITTING-4MJICX6MORING ST.062R	2	
22		296300757	SCREW-HFS-.25-20X1.75-GR8-YZ	2	
23		294901001	VALVE - GREASER	1	Breakdown Fig. 11-9c
24		82930001	FIT-6MX4M JICX4M JIC (RUN) TEE	2	
25		296300773	SCREW-HFS-.38-16X1.25-GR8-YZ	2	
26		296300850	NUT-HEXFLGTL-.38-16-G-YZ	2	

Bucket Auto Greaser Follower (1 Gallon) (S/N 267-) Fig 11-9z01r01

Illustration No. 296303104



## Bucket Auto Greaser Follower (1 Gallon) (S/N 267-) Fig 11-9z01r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296303090	RUBBER WIPER	1	(S/N 267-)
2		296303013	PLATE - FOLLOWER	1	(S/N 267-)
3		296303075	PLATE - GREASE FOLLOWER	1	(S/N 267-)
4		296300754	*SCREW-HFS-.25-20X1.00-GR8-YZ	4	
5		296300848	*NUT-HEXFLGTL-.25-20-G-YZ	4	

Bucket Auto Greaser Follower (1 Gallon) (S/N 101-266) Fig 11-9z01

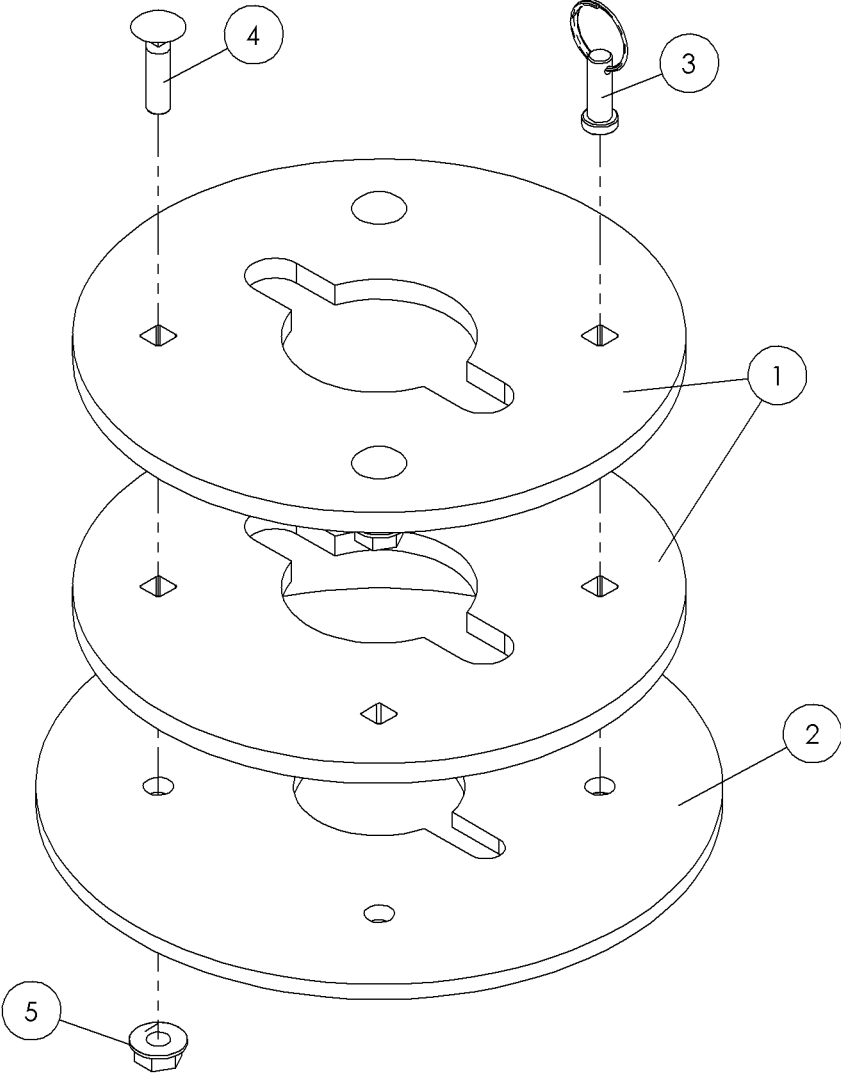


Illustration No. 296287954

## Bucket Auto Greaser Follower (1 Gallon) (S/N 101-266) Fig 11-9z01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296287951	PLATE - GREASE FOLLOWER	2	
2		296287955	SHEET - RUBBER	1	
3		296280696	PIN-CLEVIS-.25X.5 U.L. WITH RING	1	
4		373010	1/4-20X1" GD#5 CARRIAGE BOLT	3	
5		1809005	NUT-1/4 SM FLGE T.L.	3	

Bucket Auto Greaser Cylinder (S/N 267-) Fig 11-9z02r02

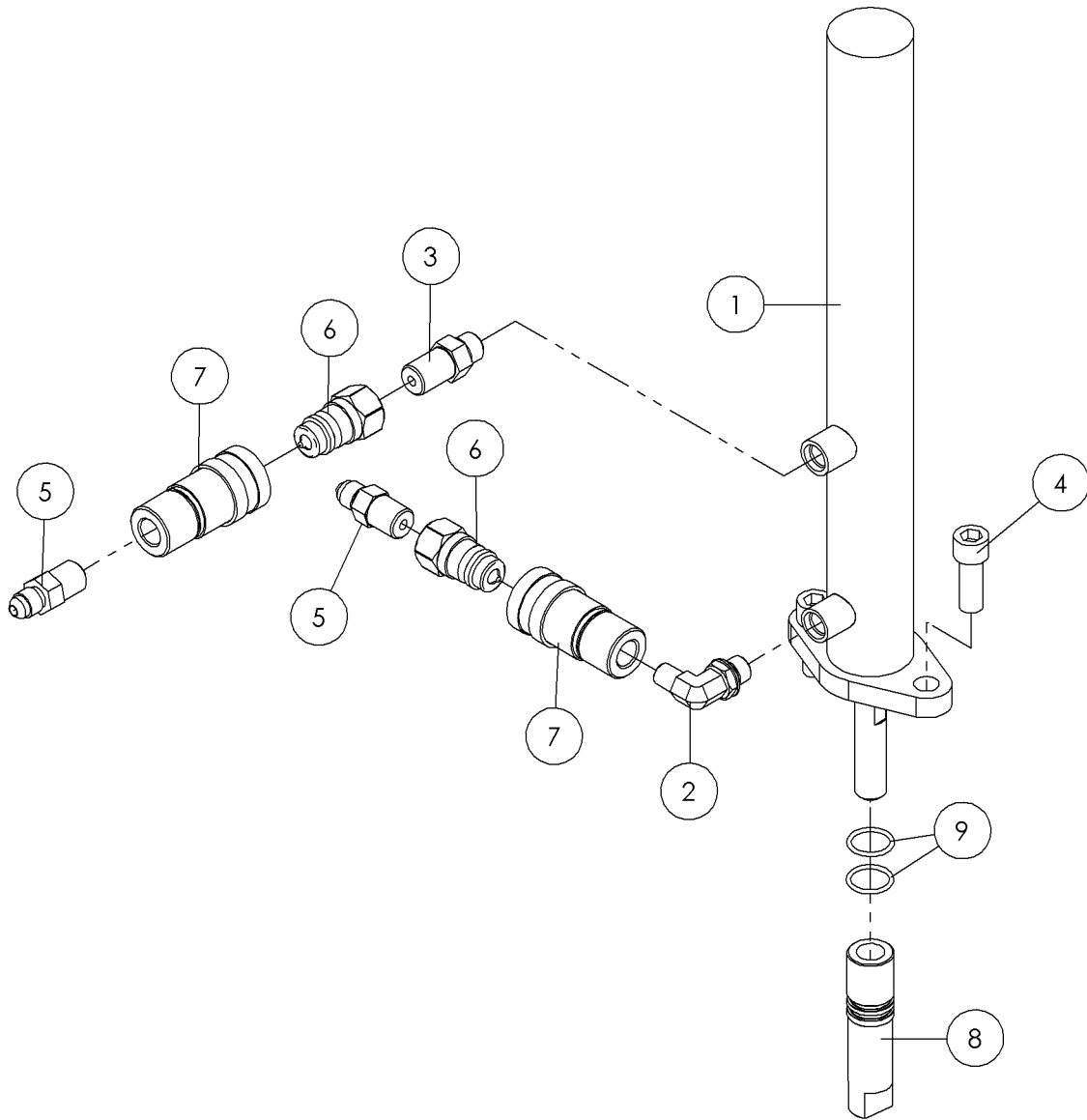


Illustration No. 296303115



## Bucket Auto Greaser Cylinder (S/N 267-) Fig 11-9z02r02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	July, 2008		Update In Illustration & Parts List.
1		296308339	CYL-1.00 BORE X 2.50 STROKE X 0.50 ROD	1	Breakdown Fig. 11-9b (S/N 123-)
2		619590001	FITTING- #4 M ORING X 1/4 MNPT 90 DEG	1	
3		296289124	FITTING - 4MOR X 4MNPT - ST	1	
4		601696010	SOCKET HD CAP SCREW 3/8-16X1 Z	2	
5		67849001	1/4 M X 4M JIC ST.	2	
6		4255003	COUPLER-1/4" M OF QUICK SET	2	
7		4255005	COUPLER-1/4" F OF QUICK SET	2	
8	*	296303045	SHAFT - PISTON	1	(S/N 267-)
9	*	296287959	O-RING - .614ID X .140 WALL	2	(S/N 267-)

Bucket Auto Greaser Cylinder (S/N 127-266) Fig 11-9z02r01

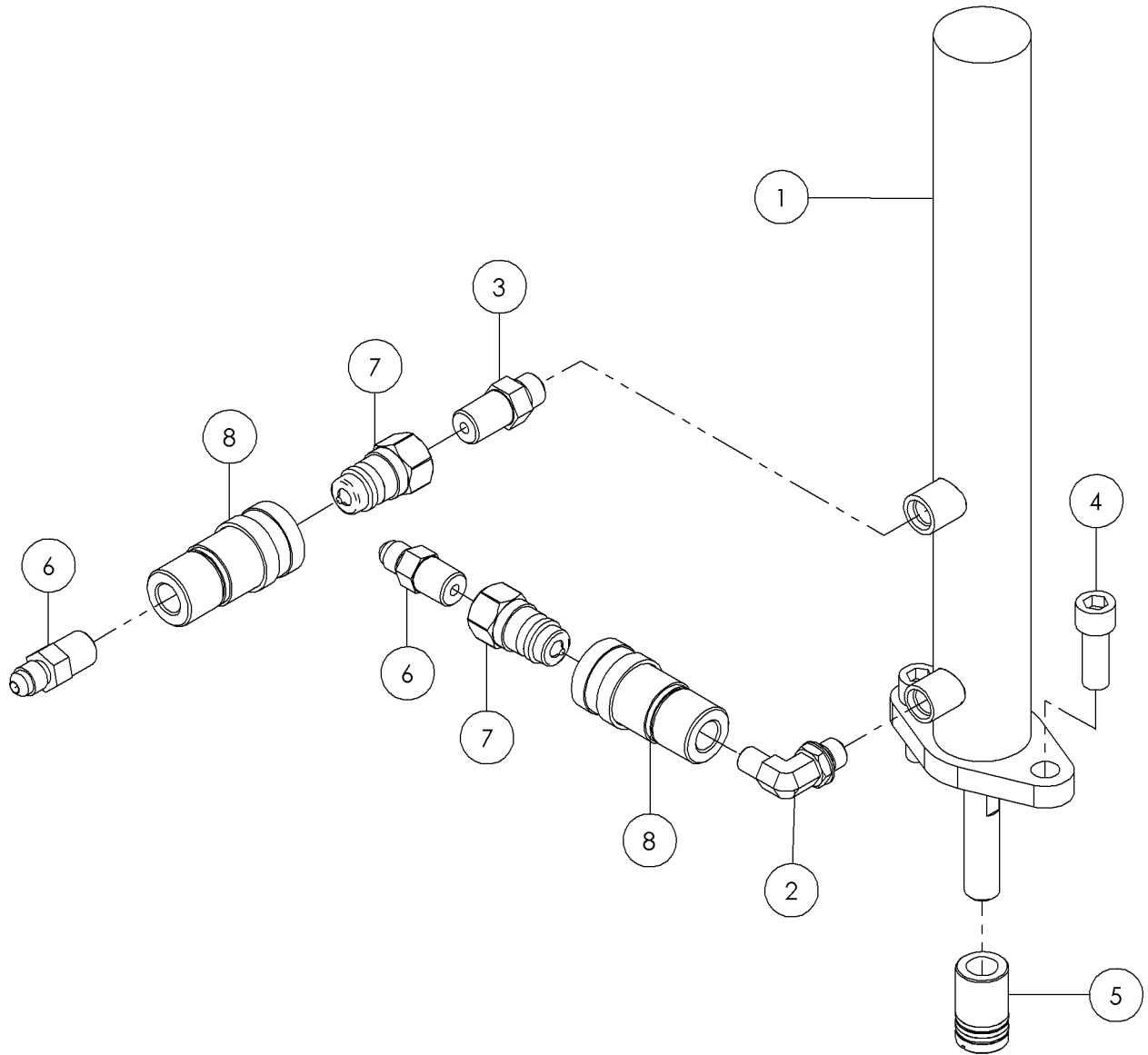
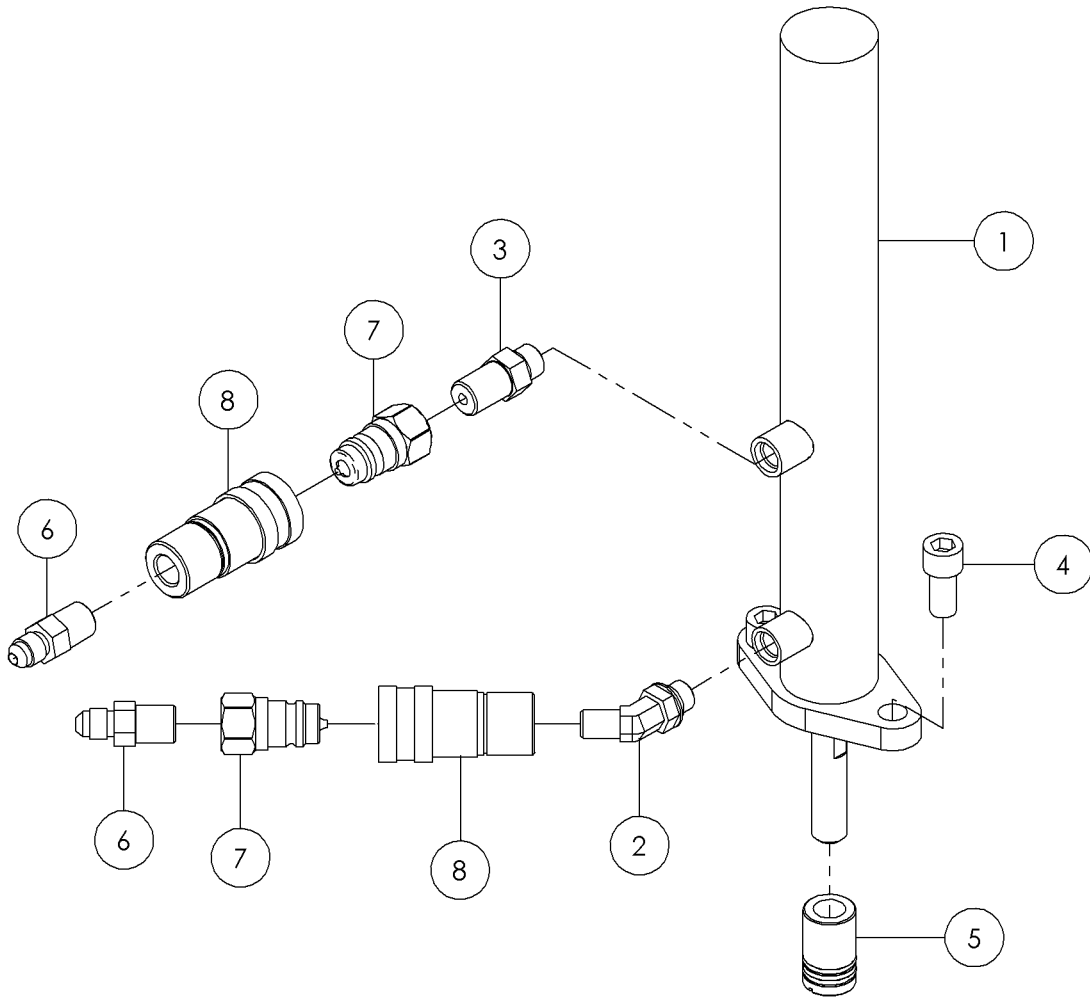


Illustration No. 296287960

## Bucket Auto Greaser Cylinder (S/N 127-266) Fig 11-9z02r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Change Cylinder
1	*	296308339	CYL-1.00 BORE X 2.50 STROKE X 0.50 ROD	1	Breakdown Fig. 11-9d (SN 127-)
2		619590001	FITTING- #4 M ORING X 1/4 MNPT 90 DEG	1	
3		296289124	FITTING - 4MOR X 4MNPT - ST	1	
4		601696010	SOCKET HD CAP SCREW 3/8-16X1 Z	2	
5		296287964	ASSEMBLY - GLAND O-RING	1	
6		67849001	1/4 M X 4M JIC ST.	2	
7		4255003	COUPLER-1/4" M OF QUICK SET	2	
8		4255005	COUPLER-1/4" F OF QUICK SET	2	

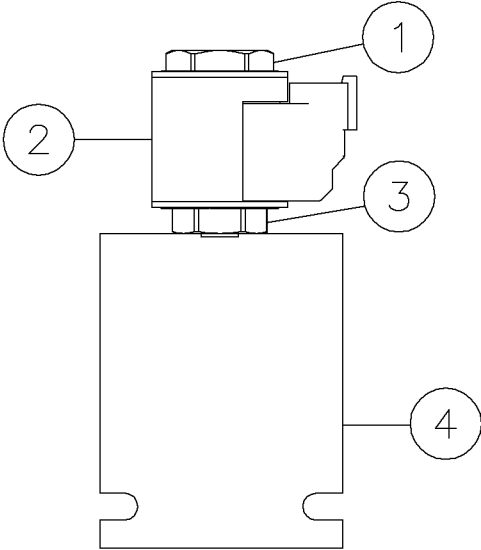
Bucket Auto Greaser Cylinder (S/N 101-126) Fig 11-9z02



## Bucket Auto Greaser Cylinder (S/N 101-126) Fig 11-9z02

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296289208	CYL - 1.00 BORE X 2.50 STROKE X 0.50 ROD	1	Breakdown Fig. 11-9d
2		296289214	FITTING - 45 - 4MNPT - 4MORBA	1	
3		296289124	FITTING - 4MOR X 4MNPT - ST	1	
4		601696010	SOCKET HD CAP SCREW 3/8-16X1 Z	2	
5		296287964	ASSEMBLY - GLAND O-RING	1	
6		67849001	1/4 M X 4M JIC ST.	2	
7		4255003	COUPLER-1/4" M OF QUICK SET	2	
8		4255005	COUPLER-1/4" F OF QUICK SET	2	

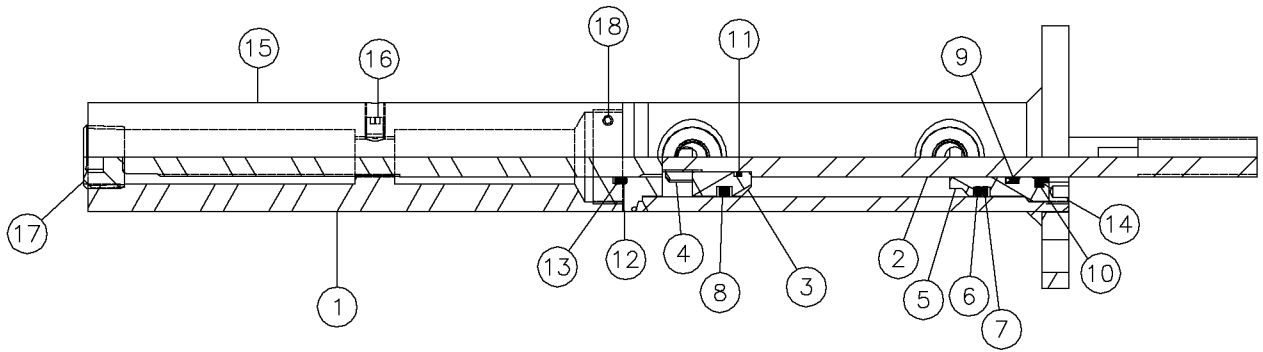
Components-Auto Greaser Valve Fig 11-9z03



## Components-Auto Greaser Valve Fig 11-9z03

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296265526	NUT-COIL	1	
2		296265527	COIL	1	
3		244725009	CARTRIDGE - SOLENOID	1	
		244725011	SEAL KIT	1	
4		NSS	BLOCK	1	Not Sold Separately
		294901001	VALVE - GREASER	1	Inc. All Items In Figure.

Components-Auto Greaser Cylinder (S/N 127-) Fig 11-9z04r01

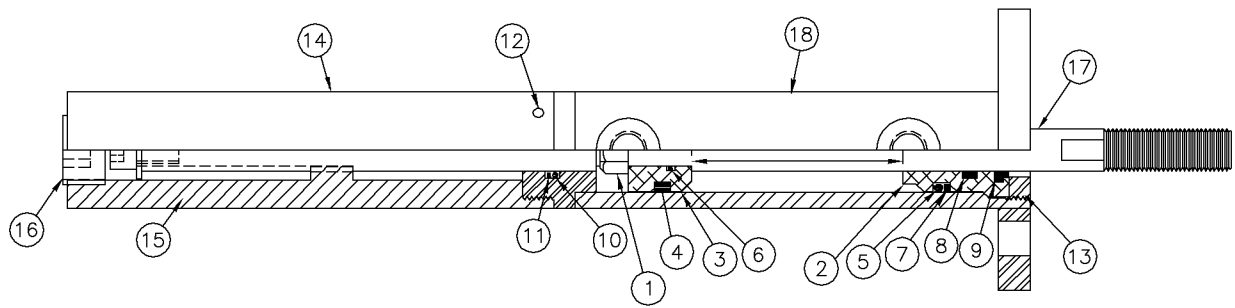




## Components-Auto Greaser Cylinder (S/N 127-) Fig 11-9z04r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Update In Illustration & Parts List.
1		NSS	BARREL ASSY	1	
2		NSS	SHAFT ASSY	1	
3		NSS	PISTON	1	
4		NSS	FULL LOCK NUT	1	
5		NSS	HEAD SHAFT	1	
6		NSS	O-RING	1	
7		NSS	BACKUP	1	
8		NSS	PSP SEAL	1	
9		NSS	BS SEAL	1	
10		NSS	DUST SEAL	1	
11		NSS	O-RING	1	
12		NSS	O-RING	1	
13		NSS	BACKUP	1	
14		NSS	INTERNAL COLLAR	1	
15		NSS	STROKE ADJUSTER	1	
16		NSS	SET SCREW	1	
17		NSS	STEEL PIPE PLUG	1	
18		NSS	ROLL PIN	1	
	*	296308339	CYL-1.00 BORE X 2.50 STROKE X 0.50 ROD	1	Inc. all Items In Figure. (SN 127-)
		296285225	REPAIR KIT		Inc. Ref. 6 Thru 13.

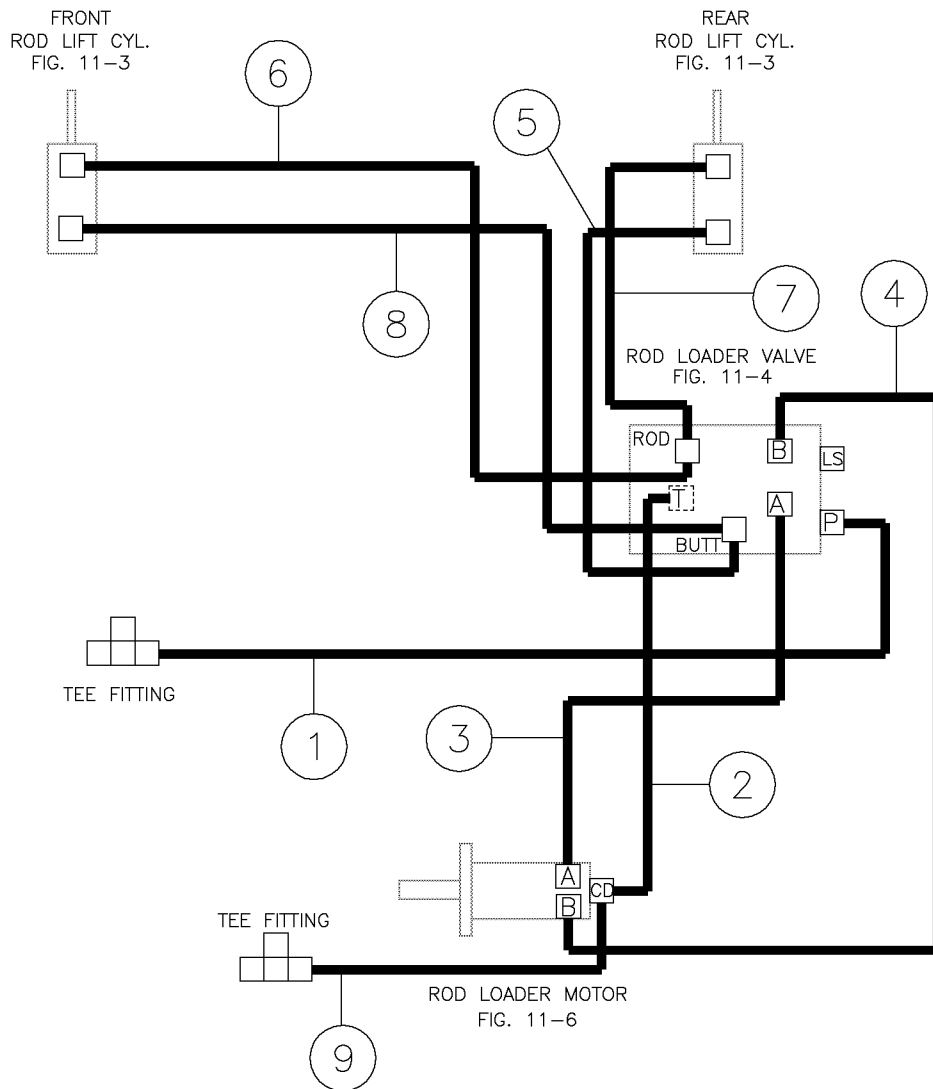
Components-Auto Greaser Cylinder (S/N 101-126) Fig 11-9z04



## Components-Auto Greaser Cylinder (S/N 101-126) Fig 11-9z04

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		NSS	NUT	1	Not Sold Separately
2		NSS	HEAD	1	Not Sold Separately
3		NSS	PISTON	1	Not Sold Separately
4		NSS	PSP-SEAL	1	Not Sold Separately
5		NSS	O-RING	1	Not Sold Separately
6		NSS	O-RING	1	Not Sold Separately
7		NSS	BACKUP	1	Not Sold Separately
8		NSS	ROD SEAL	1	Not Sold Separately
9		NSS	DUST SEAL	1	Not Sold Separately
10		NSS	O-RING	1	Not Sold Separately
11		NSS	BACKUP	1	Not Sold Separately
12		NSS	ROLL PIN	1	Not Sold Separately
13		NSS	COLLAR	1	Not Sold Separately
14		NSS	1/4-28 NYLOCK SET SCREW	1	Not Sold Separately
15		NSS	STROKE ADJUSTER	1	Not Sold Separately
16		NSS	1/2 NPT STEEL PLUG	1	Not Sold Separately
17		NSS	SHAFT	1	Not Sold Separately
18		NSS	BARREL W/PORTS	1	Not Sold Separately
		296289208	CYL - 1.00 BORE X 2.50 STROKE X 0.50 ROD		Inc. All Items In Figure.
		296285225	REPAIR KIT		Inc. Ref. 4 Thru 11

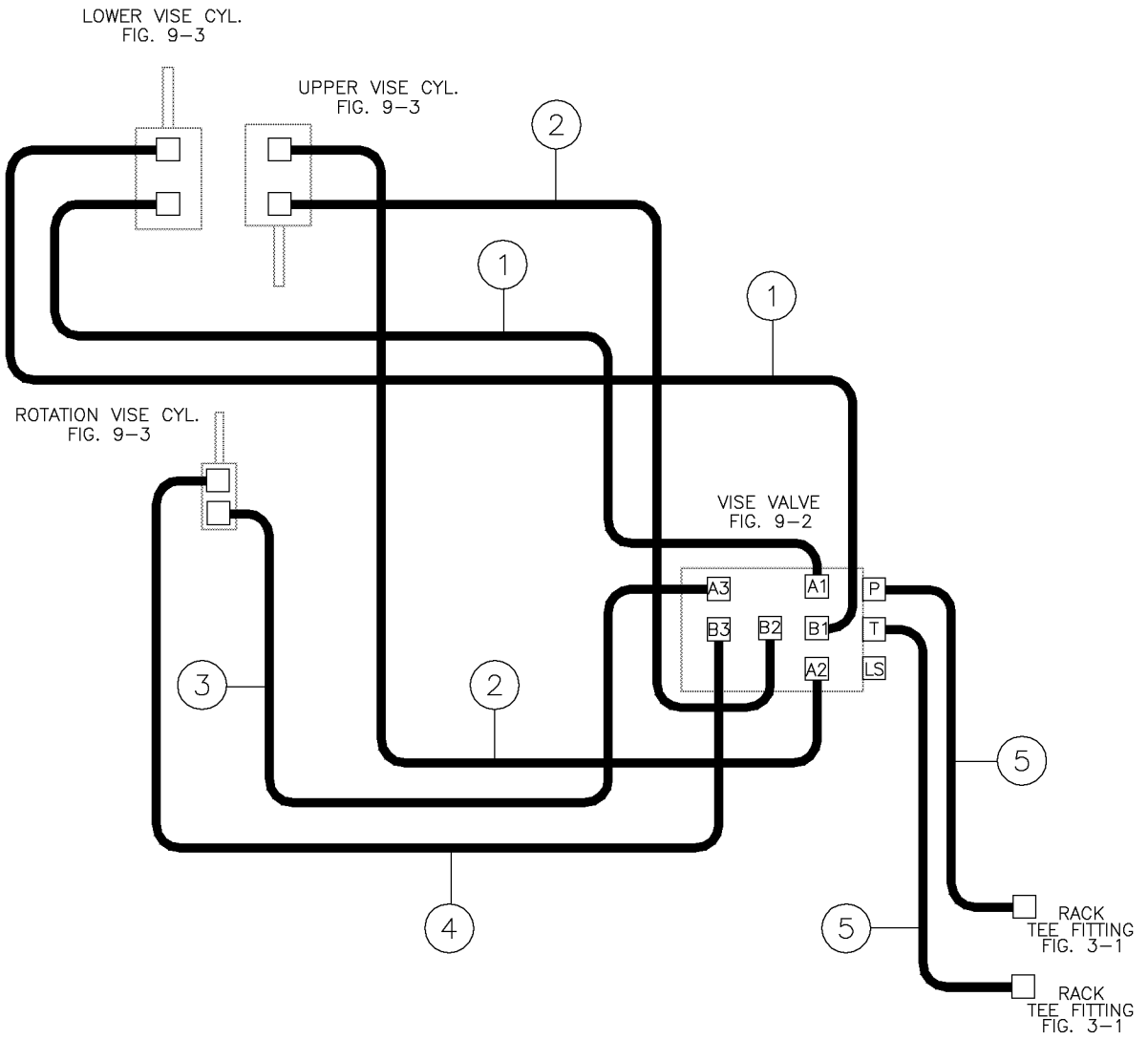
Rod loader Fig 12-1



## Rod loader Fig 12-1

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296294218	HOSE-HYD-.38X48-6FSJ-ST/ST-3000PSI	1	
2		57940793	HOSE-3/8X26 6FS JIC 3000PSI	1	
3		53843549	HOSE-1/4X11 4FS JIC 3000 PSI	1	
4		53843191	HOSE-1/4X12 4FS JIC 3000 PSI	1	
5		53843543	HOSE-1/4X38 4FSJICST/4FSJIC90	1	
6		53843213	HOSE-1/4X140 4FS JIC 3000 PSI	1	
7		296294291	LATCH BOX CULVERT TOOL INT'L	1	
8		296294220	HOSE-HYD-.25X144-4FSJ-ST/ST-3000PSI	1	
9		296294221	HOSE-HYD-.38X45-6FSJ-ST/45-3000PSI	1	

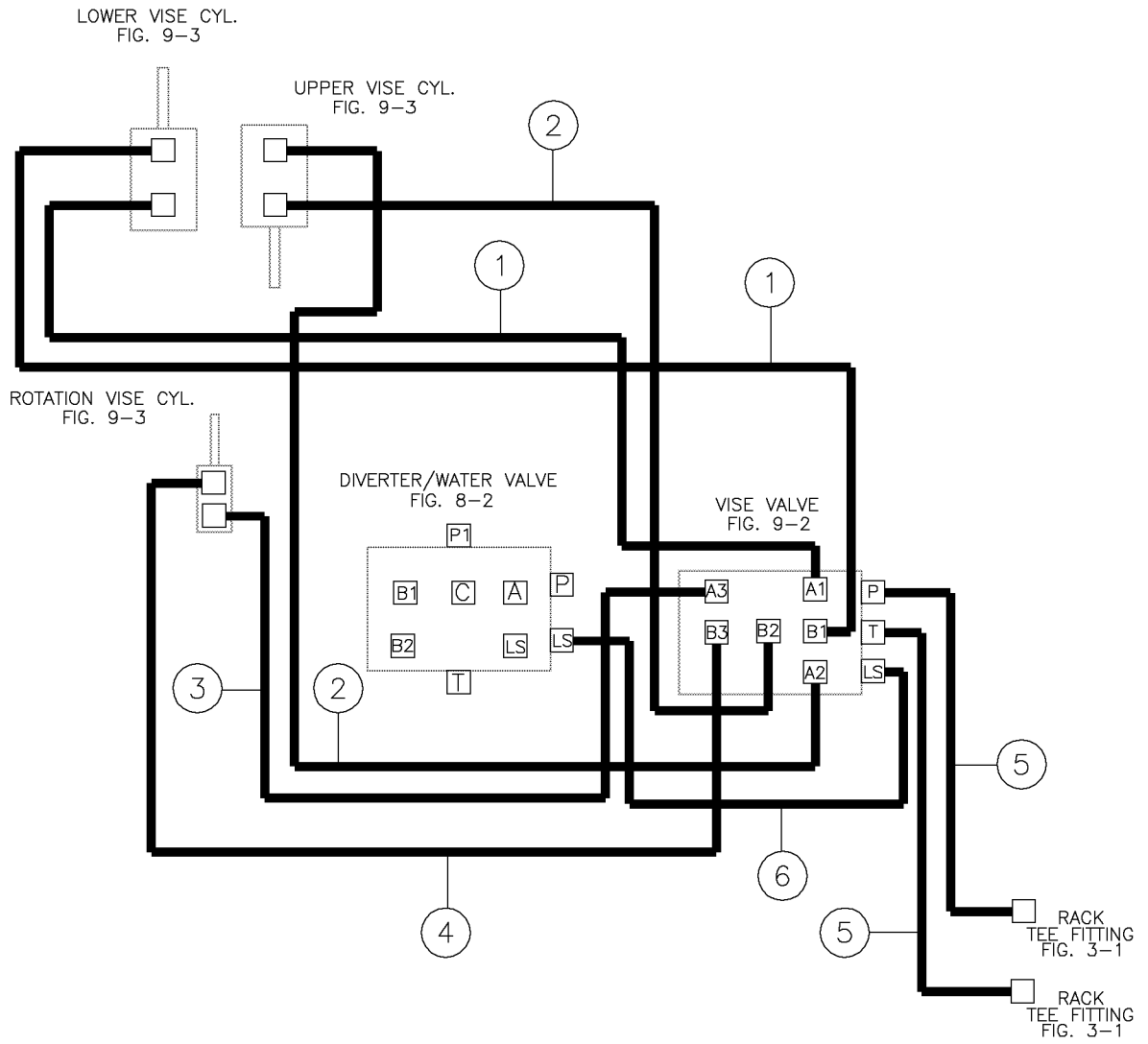
Vise Fig 12-2r01



## Vise Fig 12-2r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Move Hose to Engine Bay.
1		53843481	HOSE-1/4X60 4FS JIC 3000 PSI	2	
2		294591001	HOSE - HYD - .25 X 76 - 4FSJ - ST/90 - 3000PSI	2	
3		241955001	HOSE-1/4 X 48 4FS JIC ST/4FS JIC 45	1	
4		296294222	HOSE-HYD-.25X60-4FSJ-ST/ST-3000PSI	1	
5		273354001	HOSE-HYD-.38X48-6FSJ-ST/45-3000PSI	2	

Vise Fig 12-2

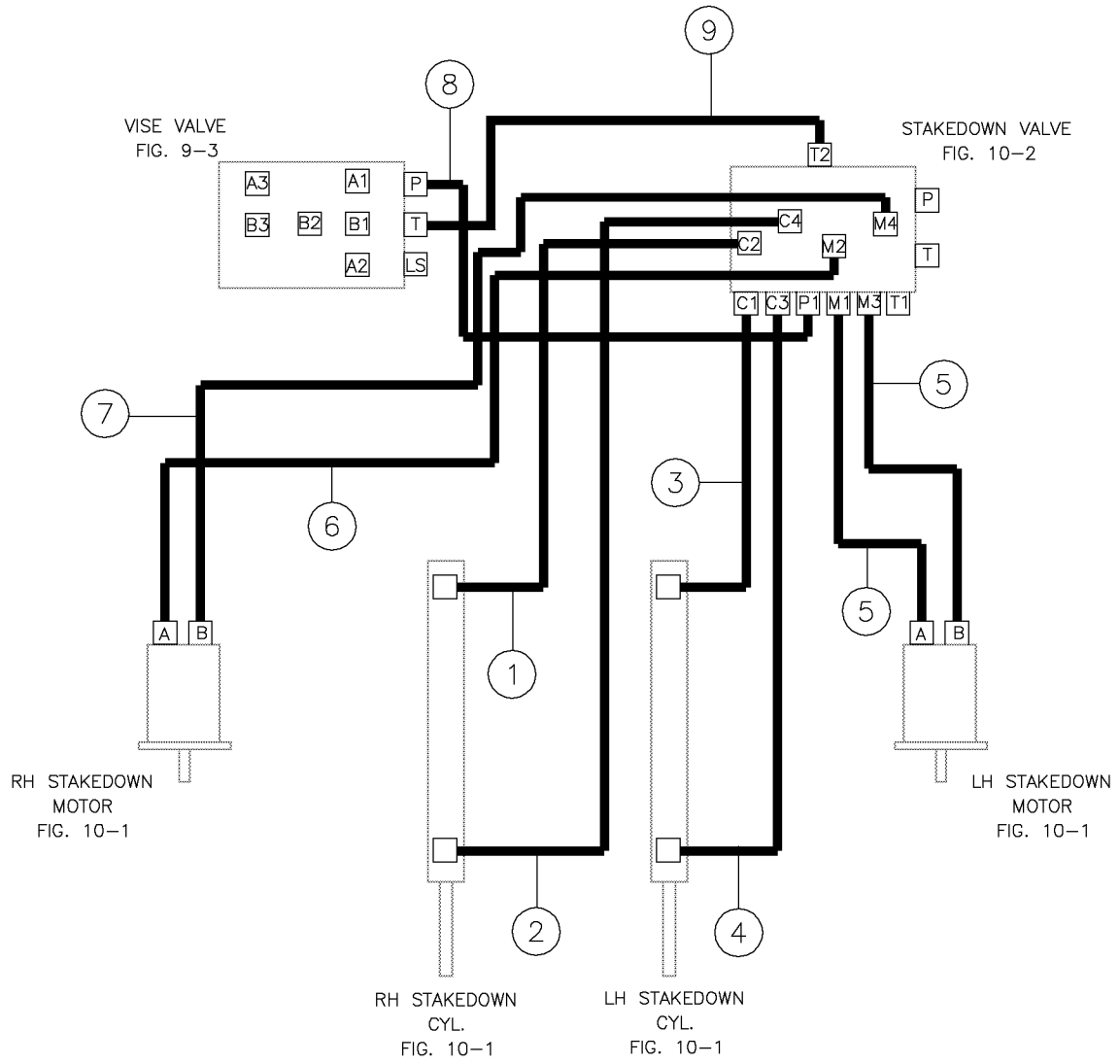




## Vise Fig 12-2

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		53843481	HOSE-1/4X60 4FS JIC 3000 PSI	2	
2		294591001	HOSE - HYD - .25 X 76 - 4FSJ - ST/90 - 3000PSI	2	
3		241955001	HOSE-1/4 X 48 4FS JIC ST/4FS JIC 45	1	
4		296294222	HOSE-HYD-.25X60-4FSJ-ST/ST-3000PSI	1	
5		273354001	HOSE-HYD-.38X48-6FSJ-ST/45-3000PSI	2	
6		296306035	HOSE-HYD-.25X104-4FSJ-ST/ST-3000PSI	1	

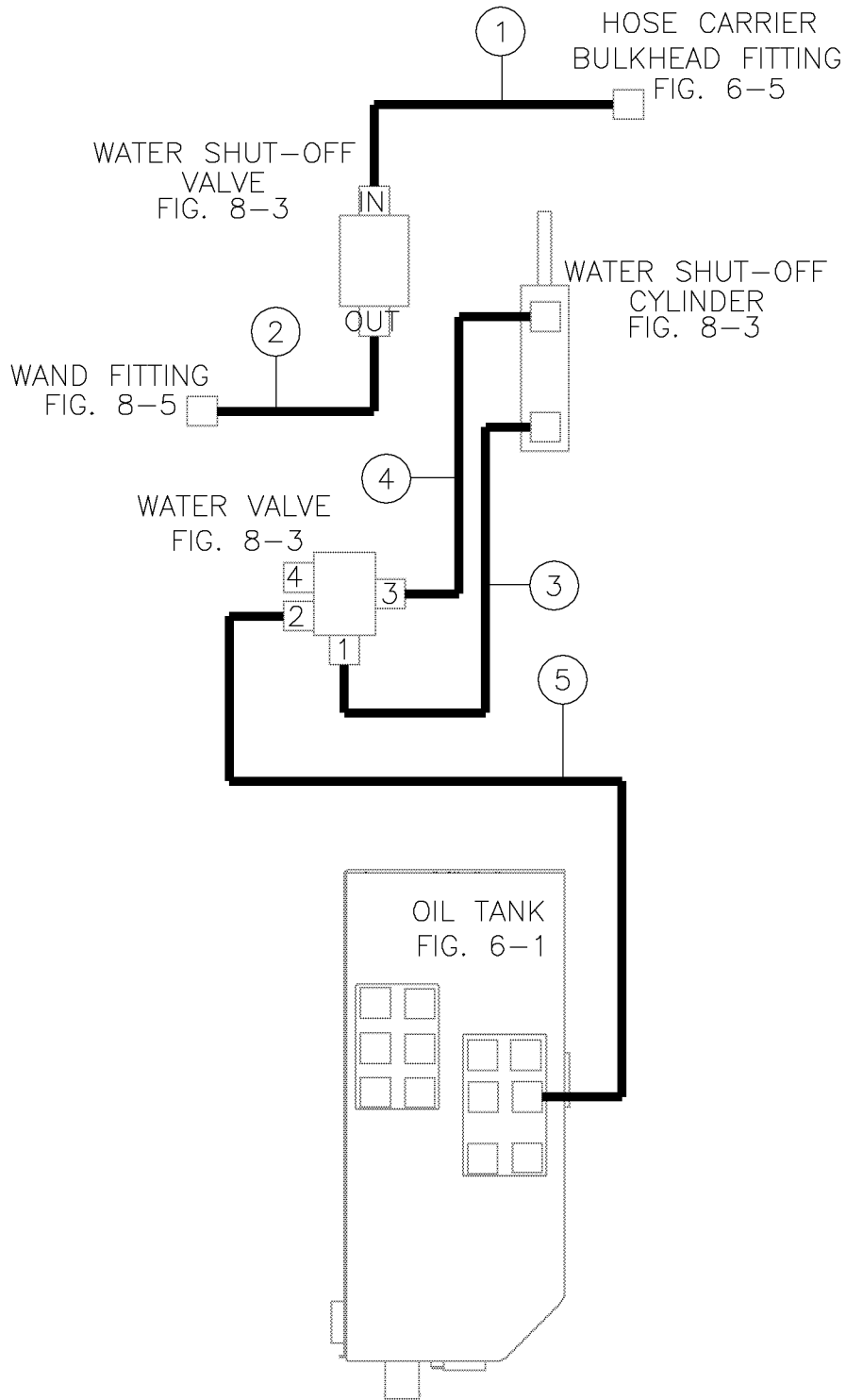
Stakedown Fig 12-3



## Stakedown Fig 12-3

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		279053001	HOSE - 3/8 X 78 6FS JIC-6FS 90DEG	1	
2		296306036	HOSE-HYD-.38X88-FSJ-ST/90-3000PSI	1	
3		57940261	HOSE-3/8X48 6FS JIC 3000 PSI	1	
4		57940161	HOSE-3/8X68-6FS JIC 3000 PSI	1	
5		57940729	HOSE-3/8X115 6FSJICST/ST 3000	2	
6		57940487	HOSE-3/8X126-6FS JIC 3000 PSI	1	
7		296286517	HOSE - 3/8 X 127 6FS ST/90 JIC 3000 PSI	1	
8		257527001	HOSE-HYD 3/8 X 20 6FS JIC ST/90	1	
9		296294223	HOSE-HYD-.36X15-6FSJ-ST/90-3000PSI	1	

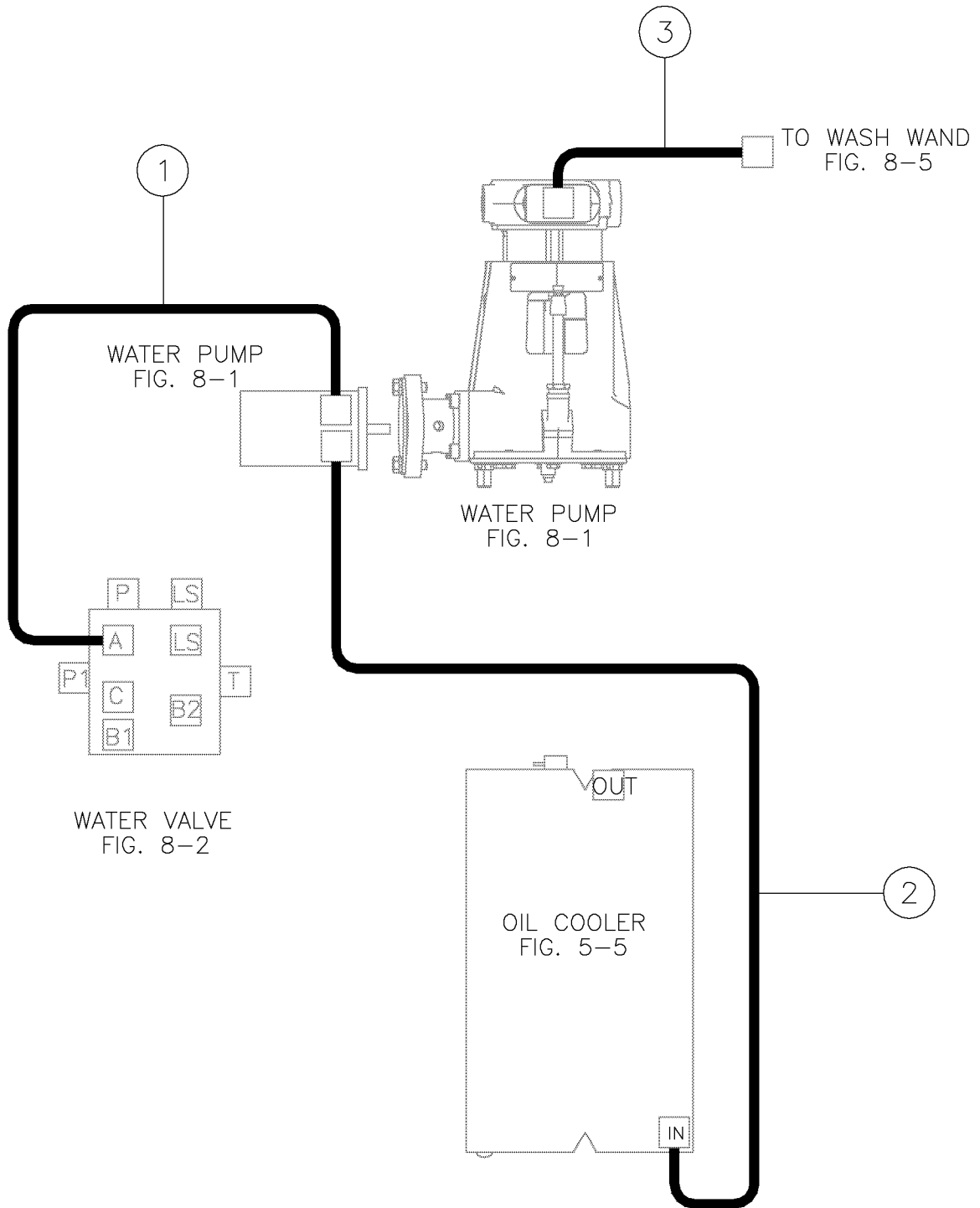
Ball Valve Fig 12-4



## Ball Valve Fig 12-4

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296306031	HOSE-HYD- .75 X 79 -12FSJ-ST/45-3000PSI	1	
2		53845789	HOSE 3/4X28 12FSJIC ST/90D3000	1	
3		296294224	HOSE-HYD-.38X37-6FSJ-ST/ST-3000PSI	1	
4		296306037	HOSE-HYD-.25X46-4FSJ-ST/90-3000PSI	1	
5		296306038	HOSE-HYD-.25X36-4FSJ-ST/ST-3000PSI	1	

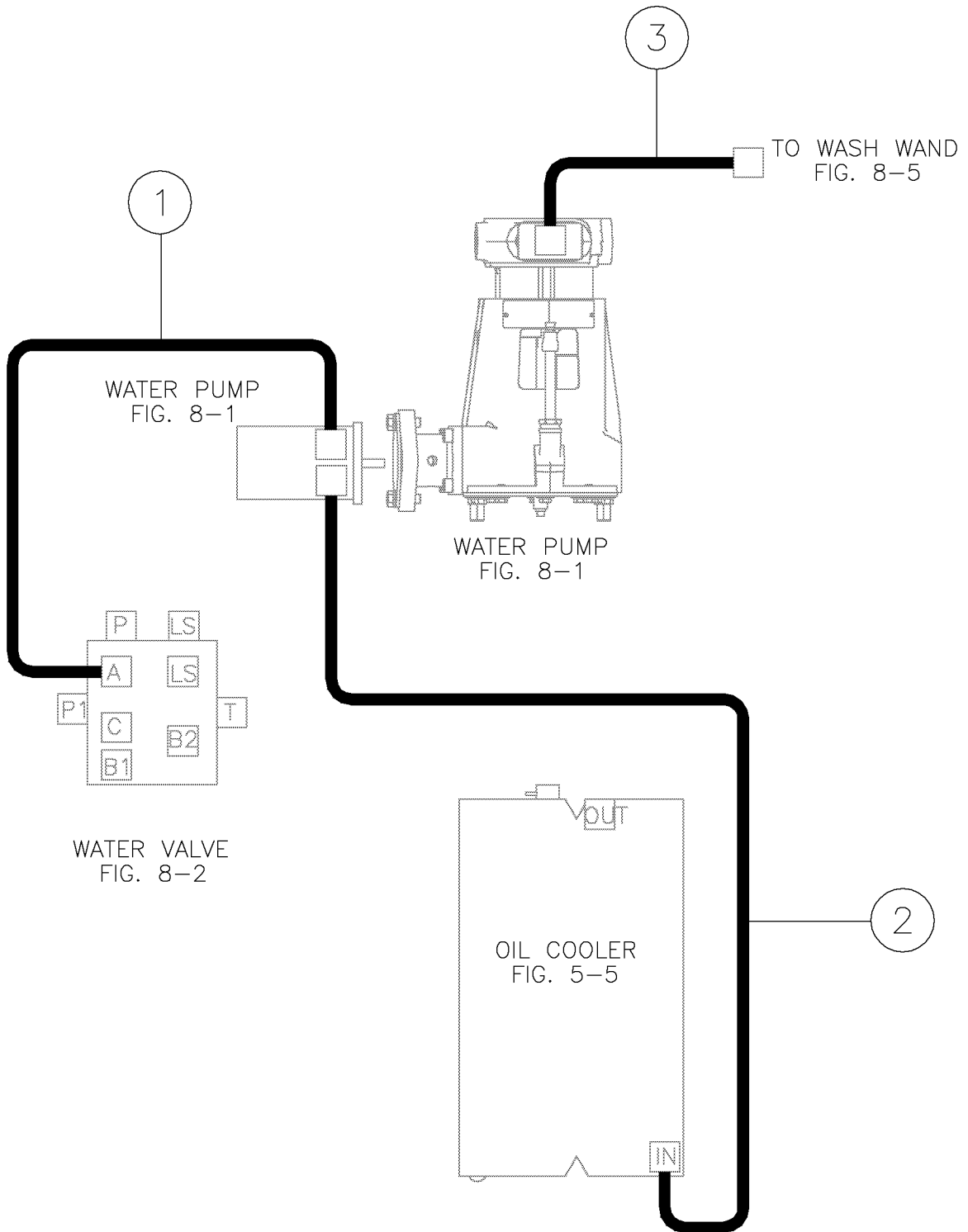
Water Pump (S/N 302-) Fig 12-5r01



## Water Pump (S/N 302-) Fig 12-5r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		53845541	HOSE-3/4X100 12FS JIC 3000 PSI	1	
2		296306039	HOSE-HYD-.50X18-8FSJ-ST/90-3000PSI	1	
3		256698001	*HOSE-HYD-.38X35-6FSJ-ST/90-M3KMTF	1	(S/N 302- )

Water Pump (S/N 101-301) Fig 12-5

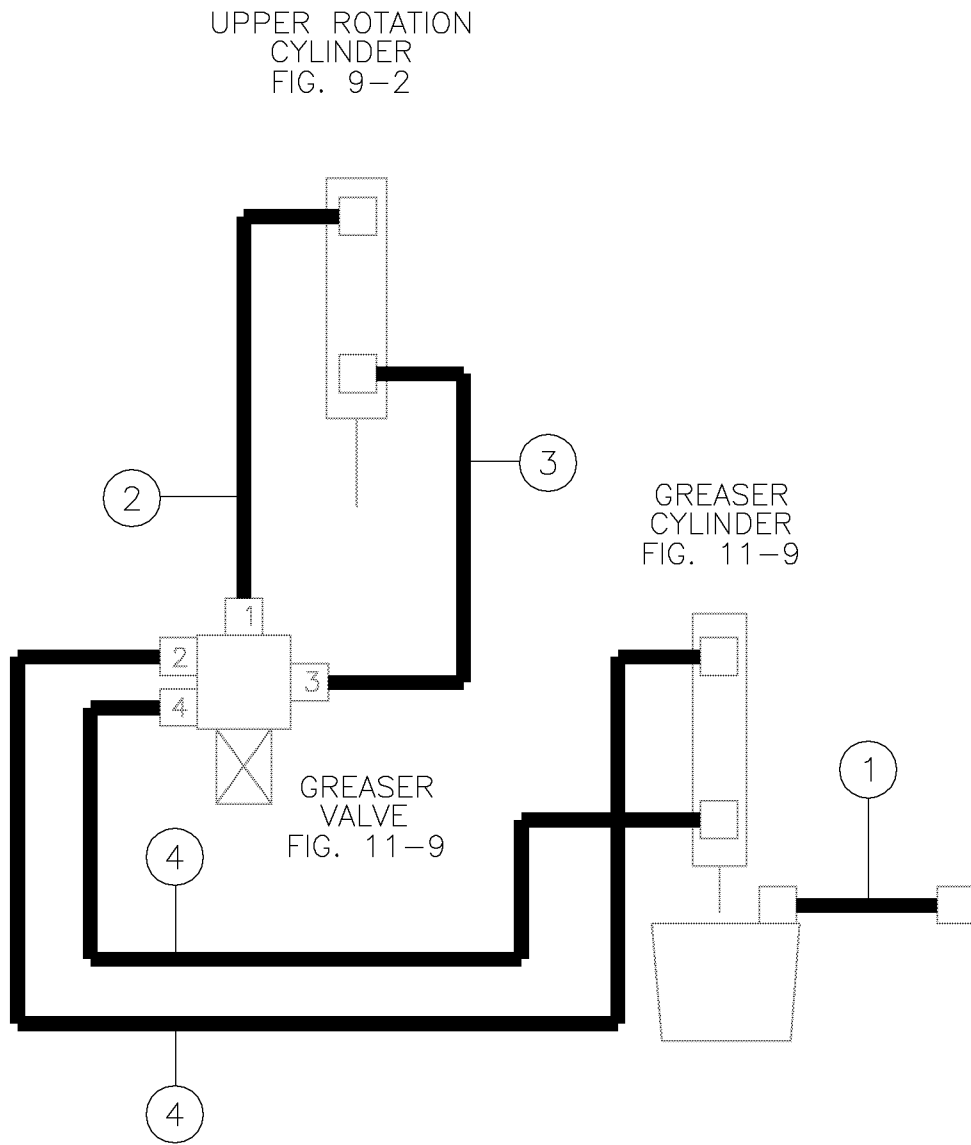




## Water Pump (S/N 101-301) Fig 12-5

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		53845541	HOSE-3/4X100 12FS JIC 3000 PSI	1	
2		296306039	HOSE-HYD-.50X18-8FSJ-ST/90-3000PSI	1	
3		151015001	HOSE - 3/8 X 30 6FS JIC X6 FS JIC 90'	1	

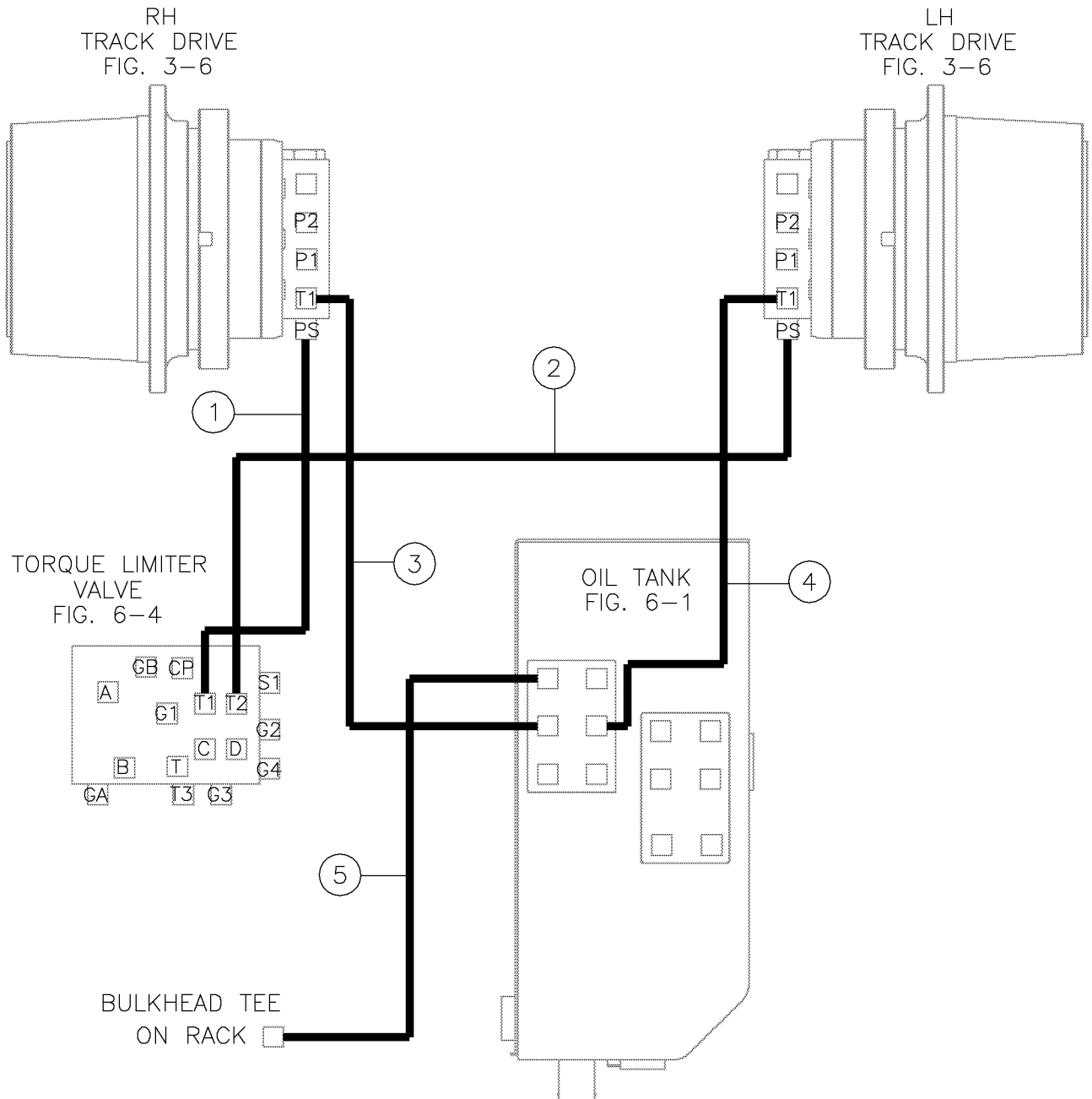
Auto Greaser Fig 12-6



## Auto Greaser Fig 12-6

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		53843197	HOSE-1/4X14 4FS JIC 3000 PSI	1	
2		53843211	HOSE-1/4X20 4FS JIC 3000 PSI	1	
3		53843715	HOSE-1/4X23 4FS JIC 3000 PSI	1	
4		53843601	HOSE-1/4X17 4FS JIC 3000 PSI	2	

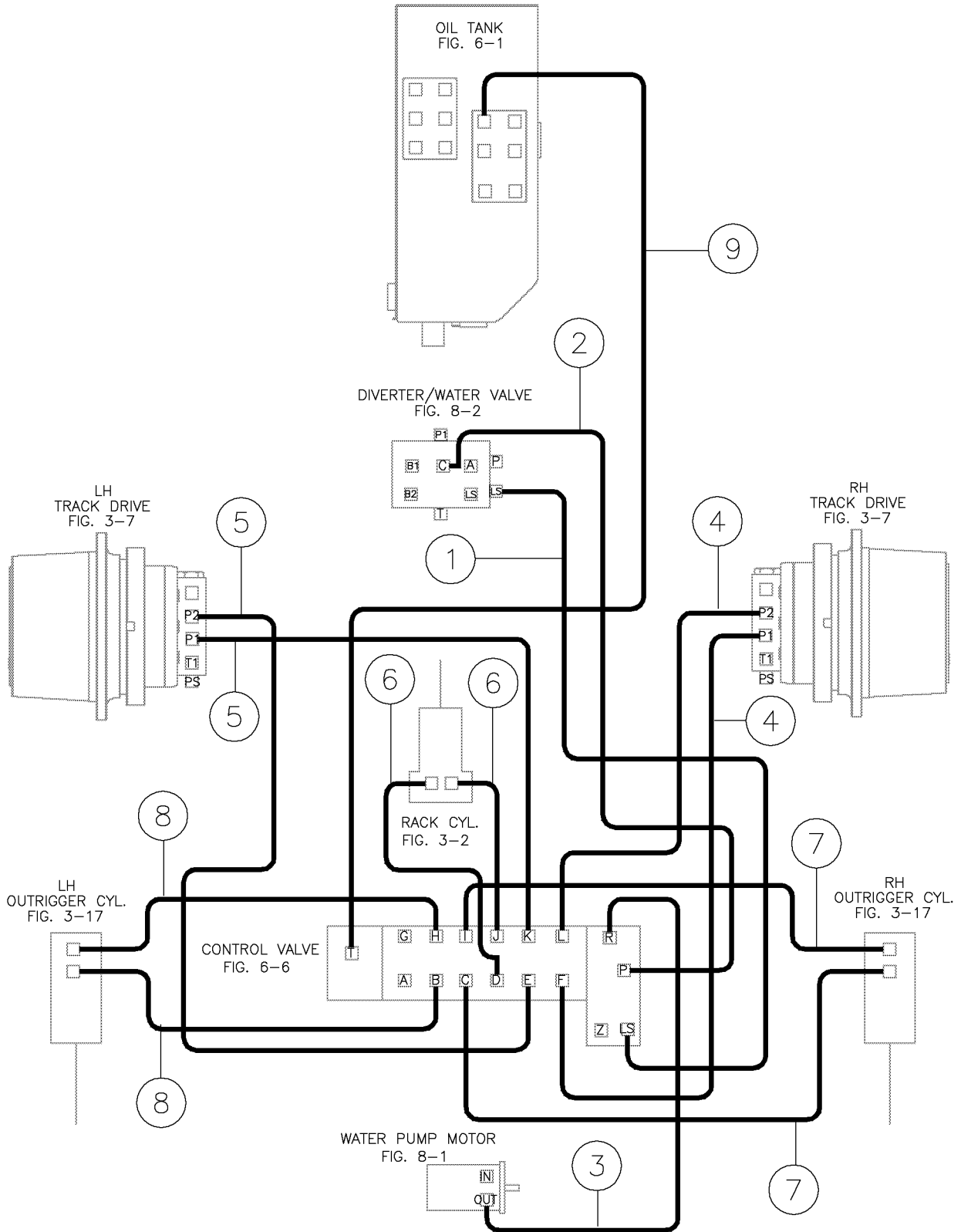
Undercariage Fig 12-7



Undercariage Fig 12-7

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	June, 2008		Update In Illustration.
1		268009001	HOSE-HYD-.25X53-4FSJ-ST90-3000PSI-100R	1	
2		261473001	HOSE-HYD-.25X70-4FSJ-ST/90-3000PSI-M3KMT	1	
3		274005001	HOSE-HYD-.38X57-6FSJ-ST/90 3000PSI	1	
4		261278001	HOSE-HYD-.38X74-6FSJ-ST/90-3000PSI-100R17-M3KMTF	1	
5		296294202	HOSE-HYD-.38X108-6FSJ-ST/45-3000PSI	1	

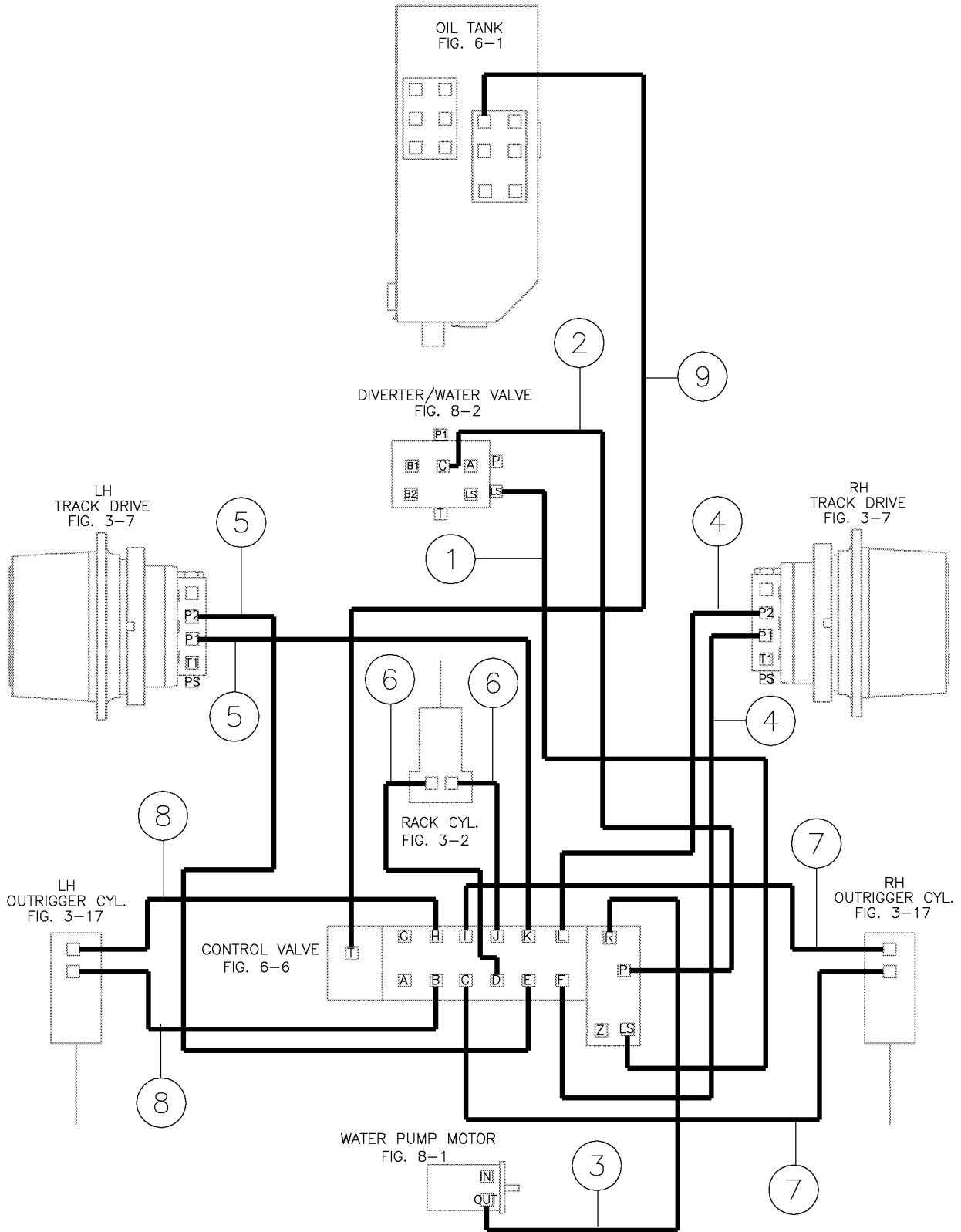
Control Valve (S/N 302-) Fig 12-8r01



## Control Valve (S/N 302-) Fig 12-8r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		53843667	HOSE-HYD-.25X125-4FSJ-ST/90-3275PSI-R1AT	1	
2		296294203	HOSE-HYD-.50X145-8FSJ-ST/90-3000PSI	1	
3		270067001	*HOSE - .50 X 50 8 FJX ST/90 3K PSI	1	(S/N 302-)
4		294617001	HOSE-HYD-.38X81-6FSJ-ST/90-3000PSI	2	
5		278843001	HOSE-3/8X92 6FSJIC ST/90 M3K	2	
6		296294204	HOSE-HYD-.25X115-4FSJ-ST/ST-3000PSI	2	
7		296294205	HOSE-HYD-.25X57-4FSJ-ST/45-3000PSI	2	
8		296294206	HOSE-HYD-.25X123-4FSJ-ST/90-3000PSI	2	
9		296306017	HOSE-HYD-.25X70-4FSJ-ST/ST-3000PSI	1	

Control Valve (S/N 101-301) Fig 12-8

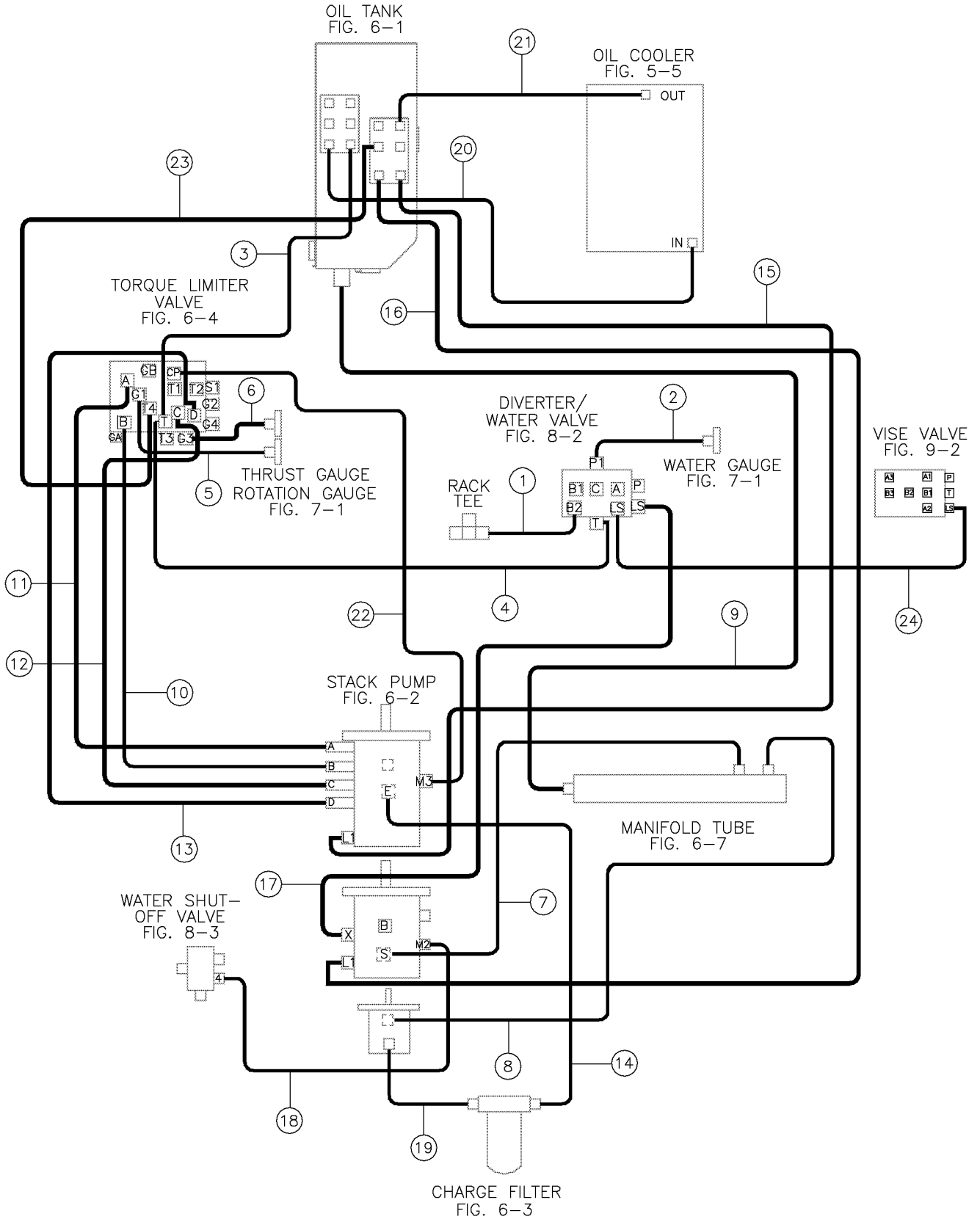




## Control Valve (S/N 101-301) Fig 12-8

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		53843667	HOSE-1/4X125 4FS JIC 3000 PSI	1	
2		296294203	HOSE-HYD-.50X145-8FSJ-ST/90-3000PSI	1	
3		296280658	HOSE-HYD-.50X32-8FSJ-ST/45-3000PSI-100R	1	
4		294617001	HOSE - HYD - .38 X 81 - 6FSJ - ST/90 - 3000PSI	2	
5		278843001	HOSE-3/8X92 6FSJIC ST/90 M3K	2	
6		296294204	HOSE-HYD-.25X115-4FSJ-ST/ST-3000PSI	2	
7		296294205	HOSE-HYD-.25X57-4FSJ-ST/45-3000PSI	2	
8		296294206	HOSE-HYD-.25X123-4FSJ-ST/90-3000PSI	2	
9		296306017	HOSE-HYD-.25X70-4FSJ-ST/ST-3000PSI	2	

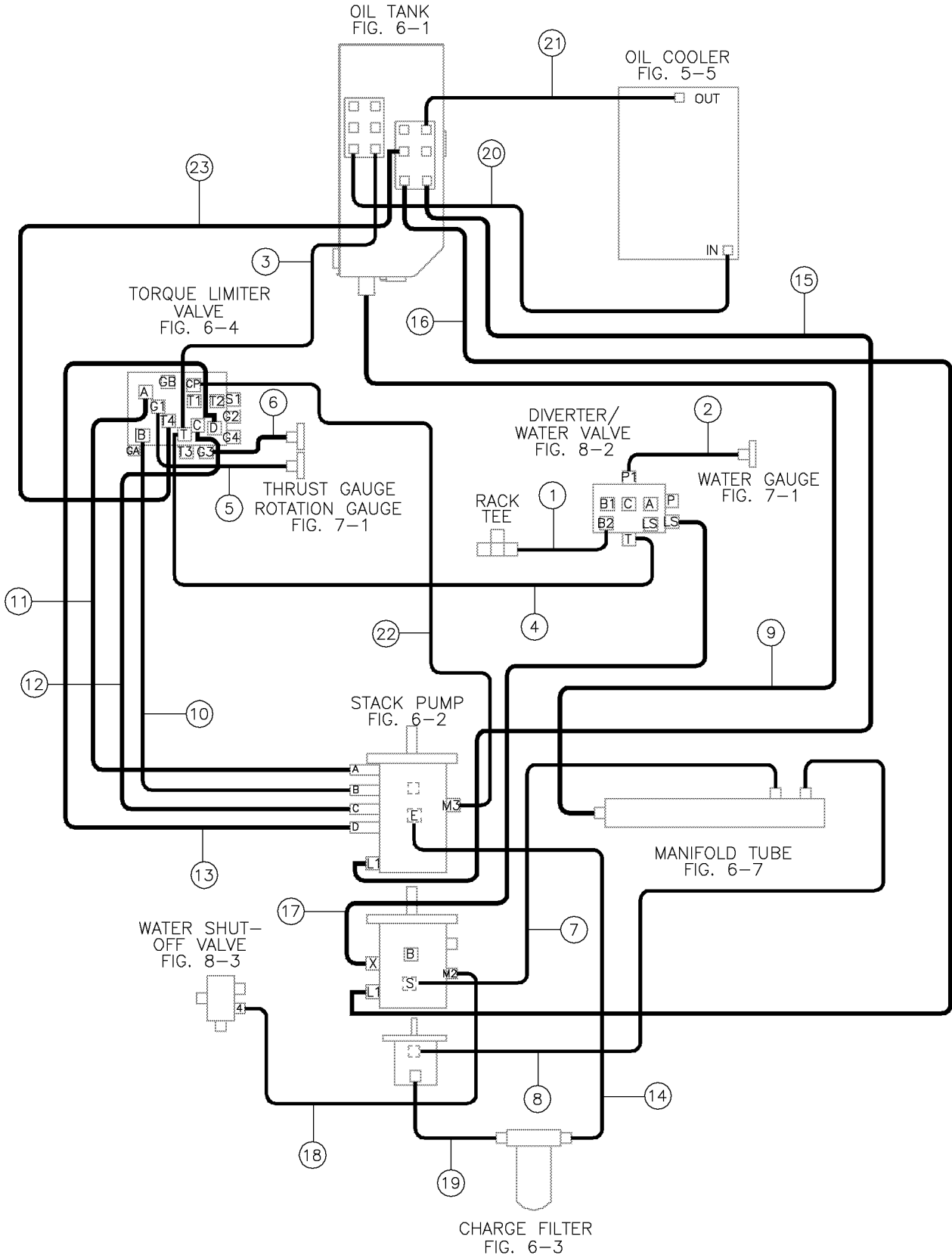
Engine Bay Fig 12-9r01



## Engine Bay Fig 12-9r01

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
		Revision Date	February, 2008		Change Hoses.
1		296294210	HOSE-HYD-.38X65-6FSJ-ST/45-3000PSI	1	
2		53843249	HOSE-1/4X103 4FS JIC 3000 PSI	1	
3		296294214	HOSE-HYD-.50X100-8FSJ-ST/90-3000PSI	1	
4		296306032	HOSE-HYD-.50X31- 8FSJ-ST/45-3000PSI	1	
5		296256890	HOSE - .25 X 110 4FS JIC ST/ST M3K	1	
6		296256892	HOSE - .25 X 115 4FS JIC ST/ST M3K	1	
7		296294211	HOSE-SUCTION-24X17-100PSI	1	
8	*	296306311	HOSE-SUCTION-20X18-100PSI	1	
9		296294213	HOSE-SUCTION-32X30-100PSI	1	
10	*	254360001	HOSE-1/2X17.50 8FS X8FS 90 JIC	1	
11		53844369	HOSE-1/2X14 8FS JIC 3000 PSI	1	
12		240750001	HOSE-1/4X21 4FS JIC ST/90 3000PSI	1	
13		296269591	HOSE - 1/4 X 19 4FSJIC ST/90 M3K	1	
14		144668001	HOSE-HYDRAULIC 1/2X25 8FS 90 DEGREES	1	
15	*	53845541	HOSE-3/4X100 12FS JIC 3000 PSI	1	
16	*	296300104	HOSE - 3/4 X 128 12FS JIC 3000PSI	1	
17		53843601	HOSE-1/4X17 4FS JIC 3000 PSI	1	
18		296294217	HOSE-HYD-.25X117-4FSJ-ST/ST-3000PSI	1	
19		296306028	HOSE-HYD-.50X29-8FSJ-ST/45-3000PSI	1	
20		296294215	HOSE-HYD-.75X38-12FSJ-ST/45-3000PSI	1	
21		296294216	HOSE-HYD-.75X28-12FSJ-ST/ST-3000PSI	1	
22		53843547	HOSE-1/4X21 4FS JIC 3000 PSI	1	
23		296306033	HOSE-HYD-.25X114-8FSJ-ST/ST-3000PSI	1	
24	*	296306035	HOSE-HYD-.25X104-4FSJ-ST/ST-3000PSI	1	

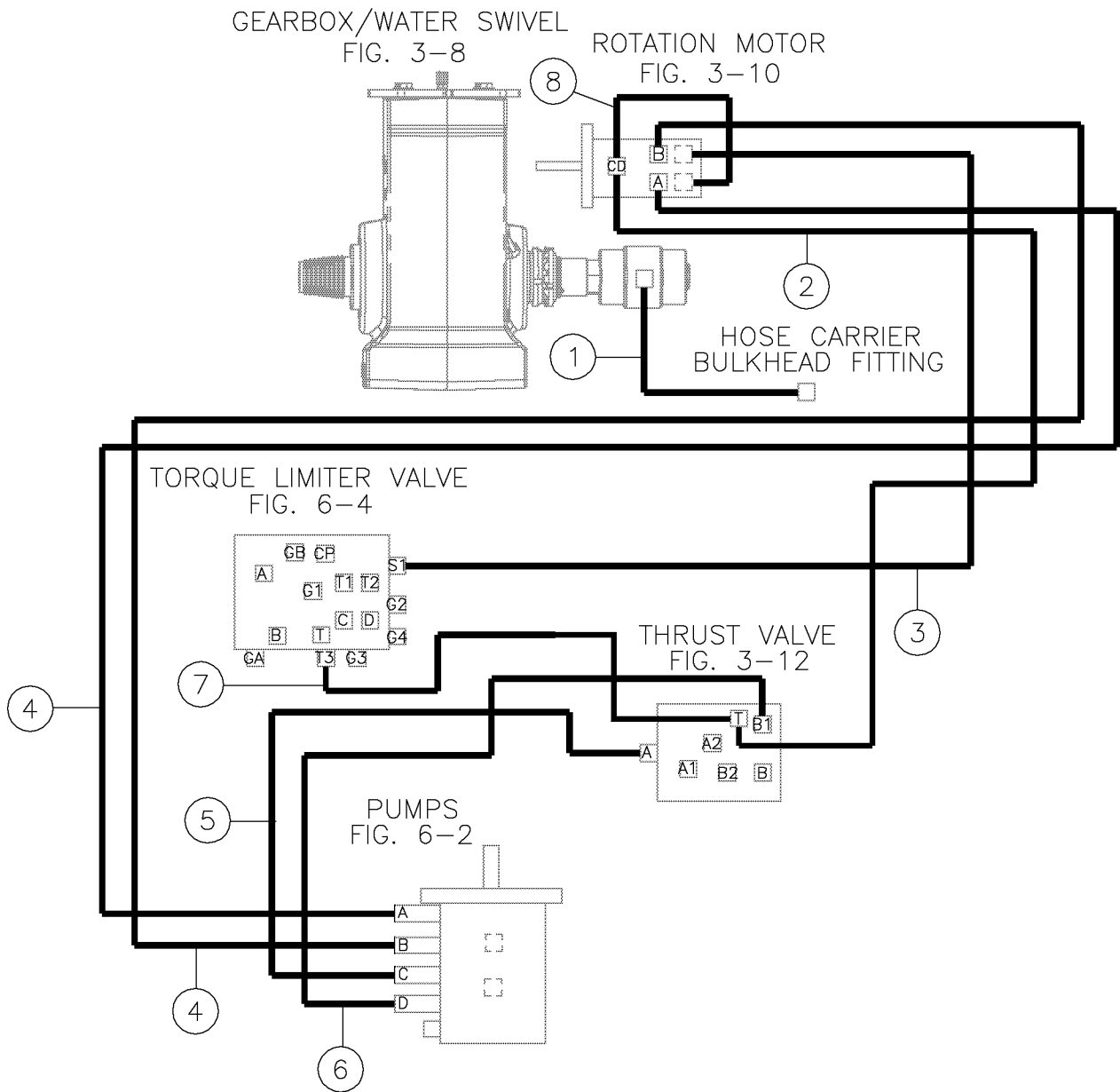
Engine Bay Fig 12-9



## Engine Bay Fig 12-9

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296294210	HOSE-HYD-.38X65-6FSJ-ST/45-3000PSI	1	
2		53843249	HOSE-1/4X103 4FS JIC 3000 PSI	1	
3		296294214	HOSE-HYD-.50X100-8FSJ-ST/90-3000PSI	1	
4		296306032	HOSE-HYD-.50X31- 8FSJ-ST/45-3000PSI	1	
5		296256890	HOSE - .25 X 110 4FS JIC ST/ST M3K	1	
6		296256892	HOSE - .25 X 115 4FS JIC ST/ST M3K	1	
7		296294211	HOSE-SUCTION-24X17-100PSI	1	
8		296294212	HOSE-SUCTION-16X19-100PSI	1	
9		296294213	HOSE-SUCTION-32X30-100PSI	1	
10		275132001	HOSE-1/2X18 8FSJIC ST/ST M3K	1	
11		53844369	HOSE-1/2X14 8FS JIC 3000 PSI	1	
12		240750001	HOSE-1/4X21 4FS JIC ST/90 3000PSI	1	
13		296269591	HOSE - 1/4 X 19 4FSJIC ST/90 M3K	1	
14		144668001	HOSE-HYDRAULIC 1/2X25 8FS 90 DEGREES	1	
15		275129001	HOSE-HYD-.75X102-12FSJ-ST/90-3000PSI	1	
16		53844165	HOSE-1/2X128 8FS JIC 3000 PSI	1	
17		53843601	HOSE-1/4X17 4FS JIC 3000 PSI	1	
18		296294217	HOSE-HYD-.25X117-4FSJ-ST/ST-3000PSI	1	
19		296306028	HOSE-HYD-.50X29-8FSJ-ST/45-3000PSI	1	
20		296294215	HOSE-HYD-.75X38-12FSJ-ST/45-3000PSI	1	
21		296294216	HOSE-HYD-.75X28-12FSJ-ST/ST-3000PSI	1	
22		53843547	HOSE-1/4X21 4FS JIC 3000 PSI	1	
23		296306033	HOSE-HYD-.25X114-8FSJ-ST/ST-3000PSI	1	

Hose Carrier Fig 12-10



## Hose Carrier Fig 12-10

REF. NO.	*	PART NO.	DESCRIPTION	QTY.	REMARKS
1		296294138	HOSE-HYD-.75X181-12FSJ-ST/ST-3000PSI	1	
2		296306040	HOSE-HYD-.38X28-6FSJ-ST/90-3000PSI	1	
3		296306027	HOSE-HYD-.25X185-4FSJ-ST/ST-3000SPI	1	
4		296294129	HOSE-HYD-.75X181-12FSJ-ST/ST-4000PSI	2	
5		296294128	HOSE-HYD-.75X158-12FSJ-ST/ST-4000PSI	2	
6		296294127	HOSE-HYD-.75X158-12FSJ-ST/90-4000PSI	1	
7		296306041	HOSE-HYD-.38X191-6FSJ-ST/90-3000PSI	1	
8		57940629	HOSE-3/8X13 6FSJIC-6FSJIC 90	1	

**NOTES:** \_\_\_\_\_

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