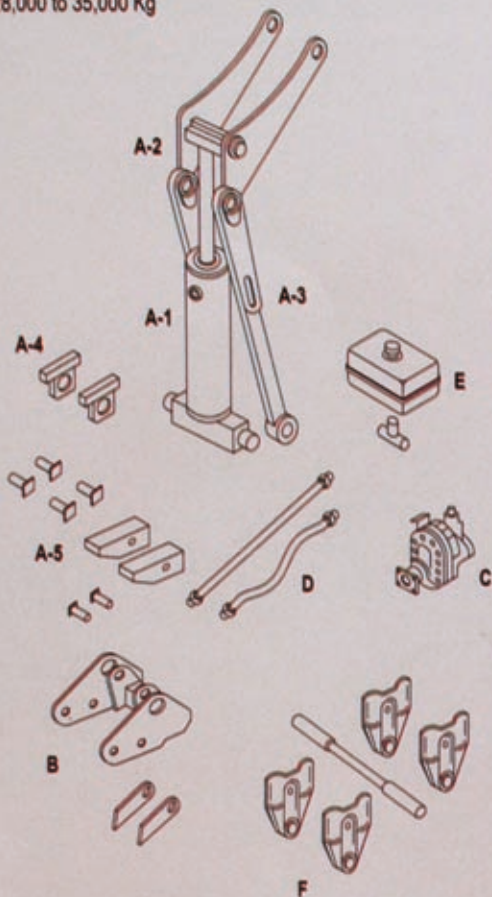


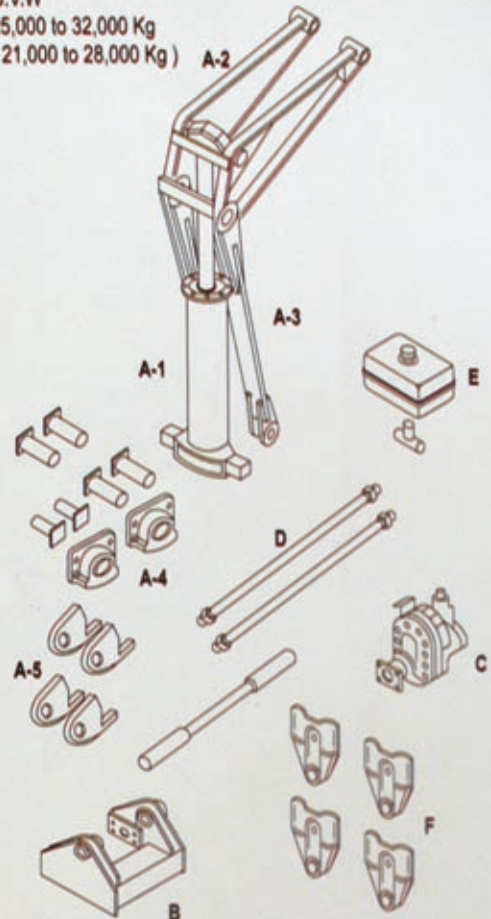
## BPA 220

G.V.W  
28,000 to 35,000 Kg



## BPA 201 / 183

G.V.W  
25,000 to 32,000 Kg  
( 21,000 to 28,000 Kg )



### STANDART PARTS

A-1 : Cylinder Ass'y

A-2 : Lift Arm

A-3 : Tension Link

A-4 : Trunnion Bracket

A-5 : Body Bracket

B : Cylinder Support Ass'y

C : Hydraulic Pump

D : Hydraulic Hoses

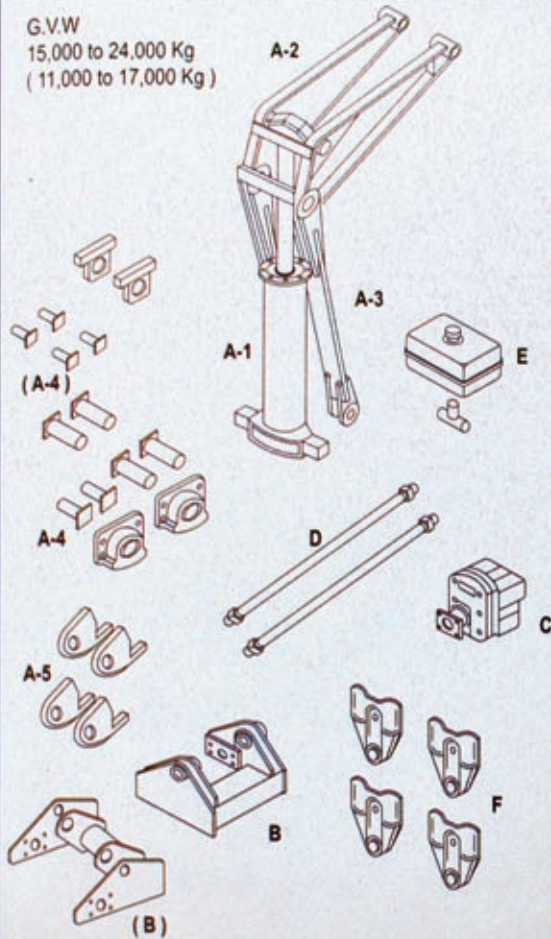
E : Oil Reservoir

F : Body Hinge Ass'y

# Hydraulic System

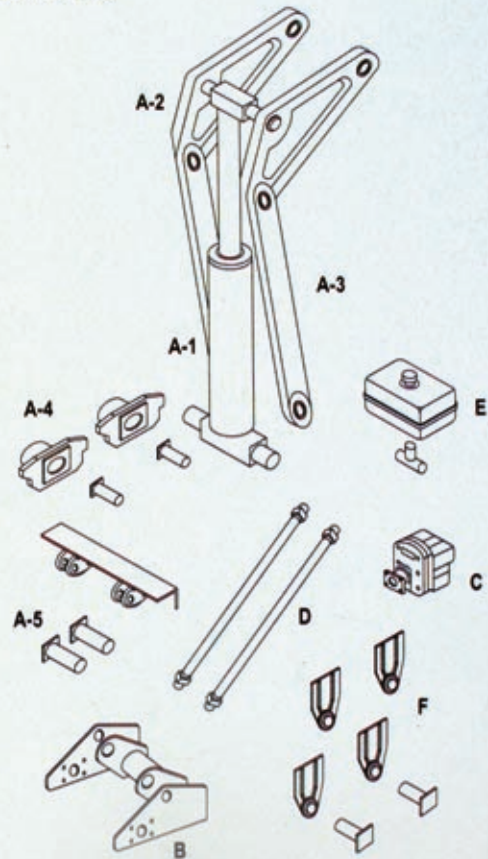
## BPA 160

G.V.W  
15,000 to 24,000 Kg  
( 11,000 to 17,000 Kg )



## BPA 143

G.V.W  
6,000 to 9,000 Kg

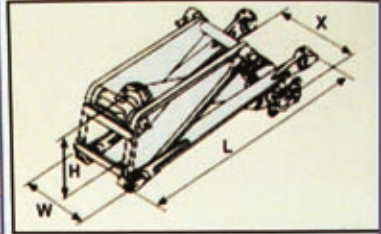


### Hoist Mounting and Maximum Lifting Capacity

Model		BPA 220	BPA 201	BPA 183	BPA 160	BPA 143
Recommended Truck	GVW (ton)	28 to 35	25 to 32	21 to 28	11 to 17	6 to 9
Body Length	L (mm)	8000	6000	5300	4900	3500
Rear Overhang	R (mm)	1050	900	900	800	600
Load Center to Hinge	l (mm)	2950	2300	2100	2000	1250
Trunnion to Hight	T (mm)	3100	2500	2480	1720	1100
Rated Lifting Capacity	(ton)	40	30	25	15	8
Designed Max. Lifting Cap.	(ton)	40 to 50	30 to 40	25 to 35	12 to 20	8 to 12

## Hoist Mechanism, Dimensions and Weight (approx.)

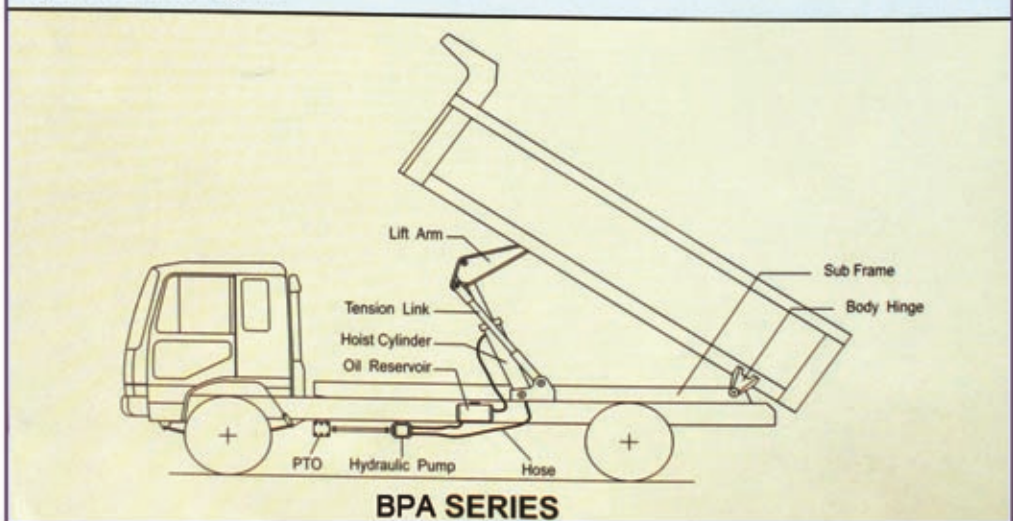
Model	BPA 220	BPA 201	BPA 183	BPA 160	BPA 143
L (mm)	1900	1765	1720	1640	1045
W (mm)	630	590	550	520	415
H (mm)	500	470	410	340	390
X (mm)	520	520	480	480	380
Weight (kg)	750	550	520	370	130



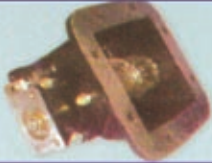






## Hoist Cylinder and Pump Combination Specifications (approx.)

Hoist Cylinder	Model	BPA 220	BPA 201	BPA 183	BPA 160	BPA 143
	Working Pressure (kgf/cm <sup>2</sup> )	100	105	70	80	60
	Inner Diameter (mm)	220	200	183	160	140
	Stroke (mm)	1069	930	880	770	510
	Retracted Cylinder Length (mm p to p)	1430	1269	1180	1160	800
	Piston Rod Diameter (mm)	100	100	90	70	60
Hydraulic Pump (cc/rev.)	Model	KKP 1405 - 1403		KKP 75	KKP 551	
	Discharge Volume (cc/rev.)	136		72	43.5	
	Maximum Pressure (Mpa)	21		21	21	
	Rated Pressure (Mpa)	8		8	8	
	Maximum Speed (rpm)	1800		1800	1800	
	Rated Speed (rpm)	800		800	800	
	Rotation	CCW in axis side				
	Gross Weight (kg)	37		21	12	

## Hydraulic-Driven Diagram



# Hydraulic System

	<b>mitsubishi FN516-526 616 626 (6SP)</b> <b>PTO MODEL</b> <ul style="list-style-type: none"><li>• M08S6-10-8HH-13</li></ul>
	<b>mitsubishi FN517 FN527 FN627 10 SPEED</b> <b>PTO MODEL</b> <ul style="list-style-type: none"><li>• M08S2X5-10-8HS-12</li></ul>
	<b>mitsubishi M12</b> <b>PTO MODEL</b> <ul style="list-style-type: none"><li>• M-12S6-10-8HS13</li><li>• M-012S6-10-8HH15</li></ul> 4.5/172-74/212-100
	<b>mitsubishi M13</b> <b>PTO MODEL</b> <ul style="list-style-type: none"><li>• M-13-10-8HS13</li><li>• M-013S-10-8HH13</li></ul> 5.5/168-76/212-98
	<b>mitsubishi M12</b> <b>PTO MODEL</b> <ul style="list-style-type: none"><li>• M-12S6-10-8HS15</li><li>• M-012S-10-8HH15</li></ul> 4.5/172-74/212-100
	<b>mitsubishi M13</b> <b>PTO MODEL</b> <ul style="list-style-type: none"><li>• M-13-10-8HS15</li><li>• M-013S-10-8HH15</li></ul> 4.5/168-76/212-98
	<b>mitsubishi M527M2L 527M3L</b> <b>PTO MODEL</b> <ul style="list-style-type: none"><li>• M-FS-6-8309BBE-10-6HH-28/32</li></ul>

	<p><b>NISSAN NU YU</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• N-MES50B-4-6HH</li></ul>
	<p><b>NISSAN UD120 LKA211N</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• N-MHS51T-4-4HS-11</li></ul>
	<p><b>NISSAN UD 183HT PKB214/216 PKC211MHRN</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• N-MLS61A-B-6-6HS-12</li></ul>
	<p><b>NISSAN 520</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• N-520-10-8HS16</li></ul>
	<p><b>NISSAN CWM454/350/12</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• N-MRT21-22-10-8HH21</li></ul>
	<p><b>NISSAN CWM454/350/7</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• N-MTS73D-10-8HH16</li></ul>
	<p><b>NISSAN CPB12 CDA211MHRR PKD211N PKC311</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• N-MPS62B-T-8-10HH-18</li></ul>

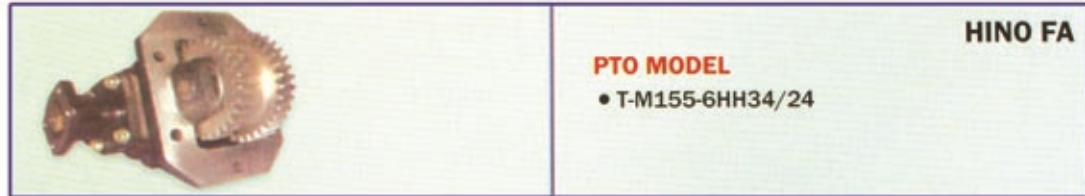
# Hydraulic System



**PTO MODEL**

- ZF-9S109-10-6HH

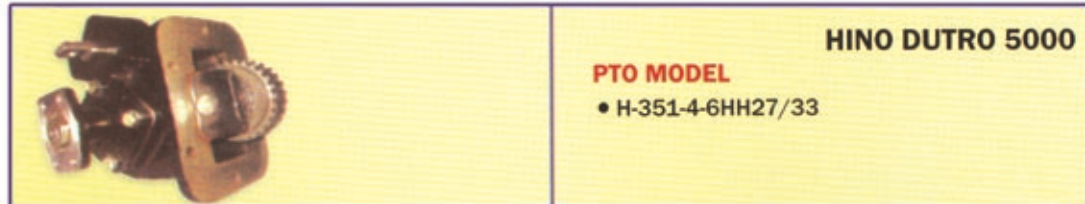
**ISUZU EXZ 270**



**PTO MODEL**

- T-M155-6HH34/24

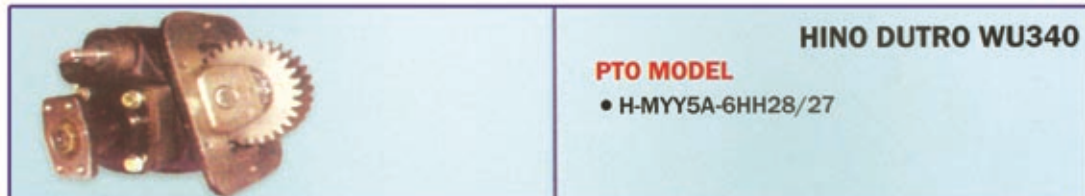
**HINO FA**



**PTO MODEL**

- H-351-4-6HH27/33

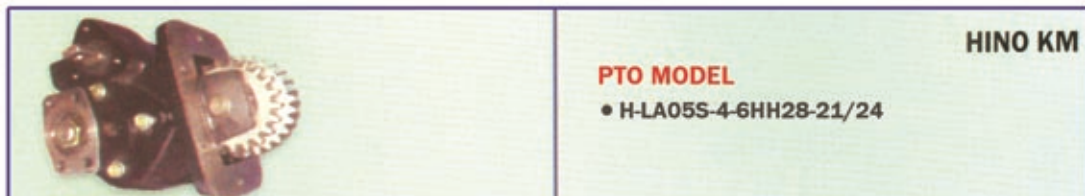
**HINO DUTRO 5000**



**PTO MODEL**

- H-MYY5A-6HH28/27

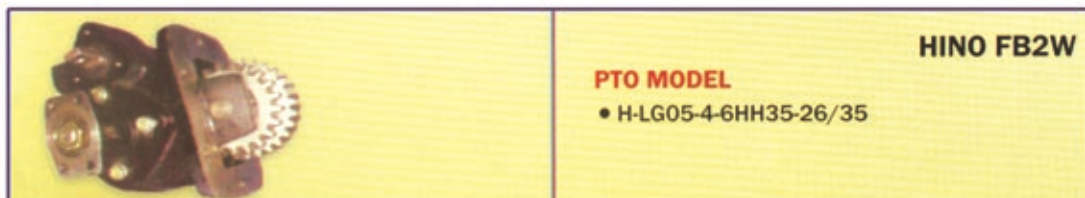
**HINO DUTRO WU340**



**PTO MODEL**

- H-LA05S-4-6HH28-21/24

**HINO KM**

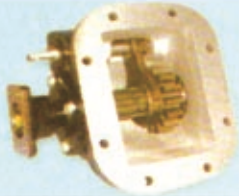


**PTO MODEL**

- H-LG05-4-6HH35-26/35

**HINO FB2W**

	<p><b>HINO KR FE2W FC4J</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• H-LE-H05-4-6HH28/21-24</li></ul>
	<p><b>HINO FF3H FC3JJMA FC4JJMA H06-7C</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• H-LF06S-6-8HH27/17-20</li></ul>
	<p><b>HINO FC4JJRA JERA JLRA</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• H-LX05S-6-8HH28/28</li></ul>
	<p><b>HINO FL3H H07D FG1J</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• H-LJ05-6-8-8HH24/27</li></ul>
	<p><b>HINO FM3H FM1J DA100 LB</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• H-MG05S-10-8HH24/17-20</li></ul>
	<p><b>HINO KT725 925</b></p> <p><b>PTO MODEL</b></p> <ul style="list-style-type: none"><li>• H-MB05-10-8HS19</li></ul>



**HINO EK ZM 226 FM1JNPA JTPA**  
**PTO MODEL**

- H-ME, F5-10-8HS15



**HINO FM3M FM2K EF550, 750 FM2PPKM**  
**PTO MODEL**

- H-HC, HK-10-8HS16



**HINO FM1JNR JNPD JKPA**  
**PTO MODEL**

- ET-FS6-8209BBE-10-6HS28/32



**HINO EP**

**PTO MODEL**

- H-EP-100-10-8HS16



**HINO FM3MF FM2KF**

**PTO MODEL**

- RT11709-10-8HS28-15/28



**HINO FM2PMPD PKPA**

**PTO MODEL**

- ZF-9S109-10-6HH22-18/21/17

	<p><b>MITSUBISHI CANTER 444 449</b> <b>PTO MODEL</b> • M-1-3S5-4-6HS12</p>
	<p><b>MITSUBISHI CANTER 435</b> <b>PTO MODEL</b> • M-01S5-4-6HH16</p>
	<p><b>MITSUBISHI CANTER 535 649</b> <b>PTO MODEL</b> • M-02S5-4-6HH16</p>
	<p><b>MITSUBISHI CANTER 657 659</b> <b>PTO MODEL</b> • M-03S5-4-6HH-16</p>
	<p><b>MITSUBISHI FK455 457 458</b> <b>PTO MODEL</b> • M-4-6S6-6-6HH-21/27</p>
	<p><b>MITSUBISHI FN516-526 (6SP)</b> <b>PTO MODEL</b> • M-8S6-10-8HS-13</p>
	<p><b>MITSUBISHI FN517 FN527 FN627 10 SPEED</b> <b>PTO MODEL</b> • M-8S2X5-10-8HS-12</p>



**ISUZU FSR FTR**

**PTO MODEL**

- I-MBD6A-Q-6-8HH-36



**ISUZU FTR FVM**

**PTO MODEL**

- I-MLD6A-Q-8-8HH-28/30



**ISUZU FVZ**

**PTO MODEL**

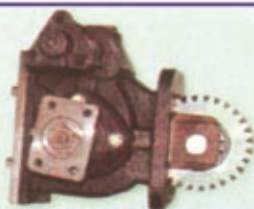
- I-ZF9S75-10-6HH-24-18/21/17



**ISUZU EXZ23FY**

**PTO MODEL**

- I-RT11609-8HH28/28



**ISUZU FXZ**

**PTO MODEL**





- I-FS6-8209-10-6HH28/32



**ISUZU SUPERROCKY 210 MLH**

**PTO MODEL**

- I-MJA/MAF-10-8HS

	<p><b>ISUZU NHR NKR55E, NKR55EY52</b> <b>PTO MODEL</b> • I-MSB-4-6HH34/22</p>
	<p><b>ISUZU NKR71, NPR71, NQR70</b> <b>PTO MODEL</b> • I-MYY5T-4-6HH30/27</p>
	<p><b>ISUZU NPR59</b> <b>PTO MODEL</b> • I-MSA5B-Q-4-6HH29/22</p>
	<p><b>ISUZU NKR71LY52, NPR71LY52, PY52</b> <b>PTO MODEL</b> • I-MXA5T-4-6HH32/19</p>
	<p><b>ISUZU NQR70LY52, RY52</b> <b>PTO MODEL</b> • I-MXA5R-4-6HH31/19</p>
	<p><b>ISUZU NQR70LY52B, RY52B 150</b> <b>PTO MODEL</b> • I-MZZ6F-5R-4-8HH36/26</p>



**NISSAN-HINO CARN**

**PTO MODEL**



**DAIHATSU 78**

**PTO MODEL**

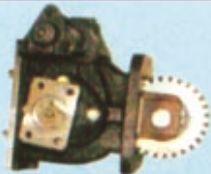
- T-BU78-2-69HH30-28/24



**TOYOTA 300**

**PTO MODEL**

- T-M150-153-4-6HH34-28/24



**NISSAN UD177ETN CWA211MHRR CWA214**

**PTO MODEL**

- ET-FS6109A-10-6HH28/32



**NISSAN CW30**

**PTO MODEL**

- N-TMH602-10-8HS17



**NISSAN CW30-10SPEED**

**PTO MODEL**

- N-TMH851-10-8HS17










**NISSAN CDA12 CWA12**

**PTO MODEL**

- N-MPS60B-10-8HS12

	<p>NISSAN CW430 UD230,250,290 CWM454/320 <b>PTO MODEL</b></p> <ul style="list-style-type: none"> <li>• N-MTS60G-10-8HS15</li> </ul>
	<p>NISSAN CW430 UD230,250,290/10SPEED <b>PTO MODEL</b></p> <ul style="list-style-type: none"> <li>• N-MTP00B-10-8HS15</li> </ul>
	<p><b>PTO MODEL</b> MAZDA 3500 400</p>
	<p><b>TRANSFER GEAR</b></p> <ul style="list-style-type: none"> <li>• V-265-R</li> <li>• V-265-L</li> <li>• 1:2.65</li> <li>• 1:2.65</li> </ul>
	<p><b>TRANSFER GEAR</b></p> <ul style="list-style-type: none"> <li>• V-400-050-R</li> <li>• V-400-050-L</li> <li>• 1:1.5</li> <li>• 1:4</li> </ul>
	<p><b>TRANSFER GEAR</b></p> <ul style="list-style-type: none"> <li>• F-050-W-R</li> <li>• F-050-W-L</li> <li>• 1:1.5</li> </ul>
	<p><b>TRANSFER GEAR</b></p> <ul style="list-style-type: none"> <li>• V-1/2-L-R C/2</li> <li>• V-1/2-L-R C/1</li> <li>• IN 1 OUT 2 CRONTON 2</li> <li>• IN 1 OUT 2 CRONTON 1</li> </ul>

# Hydraulic System

	<p style="text-align: right;"><b>TRANSFER GEAR</b></p> <ul style="list-style-type: none"> <li>• D-DANA-6-6HS</li> <li>• IN 1 OUT 2 CRONTRON 1</li> </ul>
	<p style="text-align: right;"><b>HYDRAULIC PUMP</b></p> <ul style="list-style-type: none"> <li>• KP 45</li> </ul>
	<p style="text-align: right;"><b>HYDRAULIC PUMP</b></p> <ul style="list-style-type: none"> <li>• KP 55</li> </ul>
	<p style="text-align: right;"><b>HYDRAULIC PUMP</b></p> <ul style="list-style-type: none"> <li>• KP 75</li> </ul>
	<p style="text-align: right;"><b>HYDRAULIC PUMP</b></p> <ul style="list-style-type: none"> <li>• KP 1403</li> <li>• KP 1405</li> </ul>
	<p style="text-align: right;"><b>SLIDE PLATE</b></p> <ul style="list-style-type: none"> <li>• KP 55</li> <li>• KP 75</li> <li>• KP 1403</li> <li>• KP 1405</li> </ul>
	<p style="text-align: right;"><b>BEARING</b></p> <ul style="list-style-type: none"> <li>• KP 55</li> <li>• KP 75</li> <li>• KP 1403</li> <li>• KP 1405</li> </ul>