

## SECTION 7. PARTS INFORMATION

### 7.1 PARTS ORDERING PROCEDURE

- A. Contact your local dealer, distributor or Authorized service center  
 B. Contact Capitol Gears, Inc. If the above cannot supply the part(s). Write:

Customer Service      Cable Address:  
 Capitol Gears, Inc.      "Capmarine"  
 349 North Hamline Ave. Telephone: 645-9491  
 St. Paul, MN 555104      Area Code: 612  
 USA                              Telex: 28-7081

**NOTE:**  
 To avoid unnecessary delay be sure part description is accurate in every detail.

A list of distributors for Captiol Gear equipment may be obtained by writing to the customer service department at the address mentioned above.

- C. Always give complete part description as shown In the sample column below:

**Do Not** send any equipment to the factory without authorization from the Customer Service Department.

Necessary Information	Sample
1. Model	1. HE 10200 A.E.R
2. Option	2. 2-10200-04012-50200
3. Serial #	3. 10122-0476 or 730400
4. Ratio	4. 2.929:1
5. Eng. Mfg.No (If any)	5. 21898
6. Part Number	6. 1-13350-0000
7. Description	7. Cooler assembly
8. Figure number and Reference number	8. Fig. 45/11
9. Quantity being ordered	9. One (1)

Captiol Gears will route parts with customer's best interest in mind if routing is not specified when ordering.

Captiol Gears, Inc. will provide its distributors, dealers and service centers with current changes and additions to service literature.

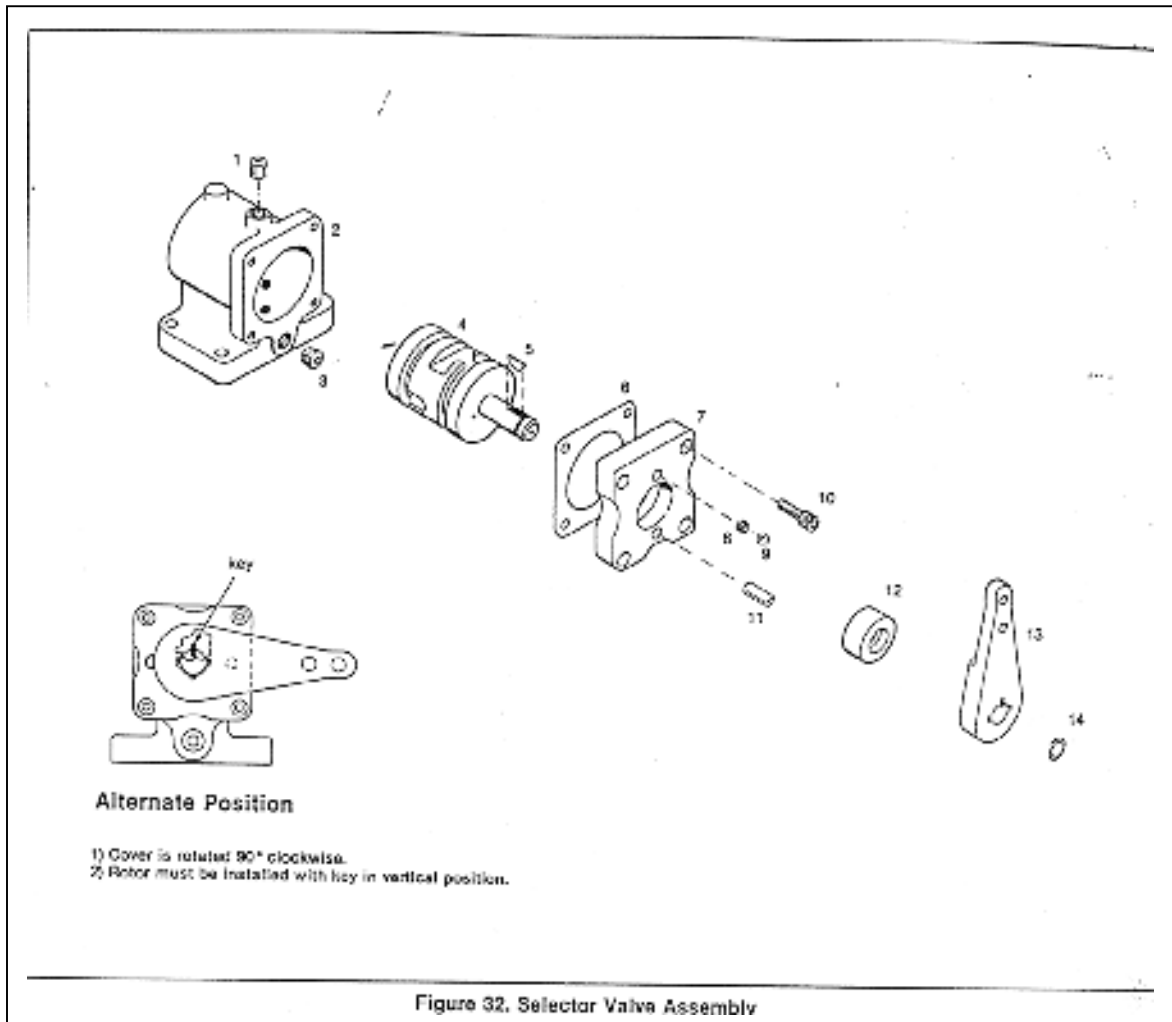
Contact your local Capitol representative for up to date service material.

### 7.2 UNIT RECORD

(For owner's reference)

"CAPITOL" Marine Gear Model \_\_\_\_\_  
 Serial No. \_\_\_\_\_  
 Installed in (Name of Vessel) \_\_\_\_\_  
 Installed by \_\_\_\_\_ Date: \_\_\_\_\_  
 Address \_\_\_\_\_  
 For use with (Engine & Model) \_\_\_\_\_  
 Type of Service \_\_\_\_\_  
 Purchased from (Dealer's Name and Add.) \_\_\_\_\_  
 \_\_\_\_\_  
 Date Purchased \_\_\_\_\_

### 7.3 SELECTOR VALVE



ITEM	DESCRIPTION	PART NO.	QTY
REFERENCE	ASSEMBLY, SELECTOR VALVE	1-01175-2000	1
1	PIPE PLUG, HEX SOCKET, 1/8" NPT	1-11279-0200	1
2	BLOCK, VALVE	1-01141-1600	1
3	PIPE PLUG, HEX SOCKET, 1.4"- 18 NPT	1-11279-0300	1
4	VALVE, ROTARY	1-01144-1500	1
5	KEY	1-01164-3200	1
6	GASKET, VALVE COVER	1-01156-1500	1
7	COVER, VALVE	1-12417-1000	1
8	SPRING, INDEXING	1-01132-1500	1
9	BALL, INDEXING, 1/4" DIA	1-11200-0000	1
10	CAPSCREW, SOCKET HEAD, 10-24" LG	1-12844-0000	4
11	SPRING PIN 1/4 DIA. X 1/2" LG	1-12097-0800	1
12	OILSEAL	1-01155-1500	1
13	LEVER	1-12419-1000	1
14	RING, RETAINING	1-01180-1500	1

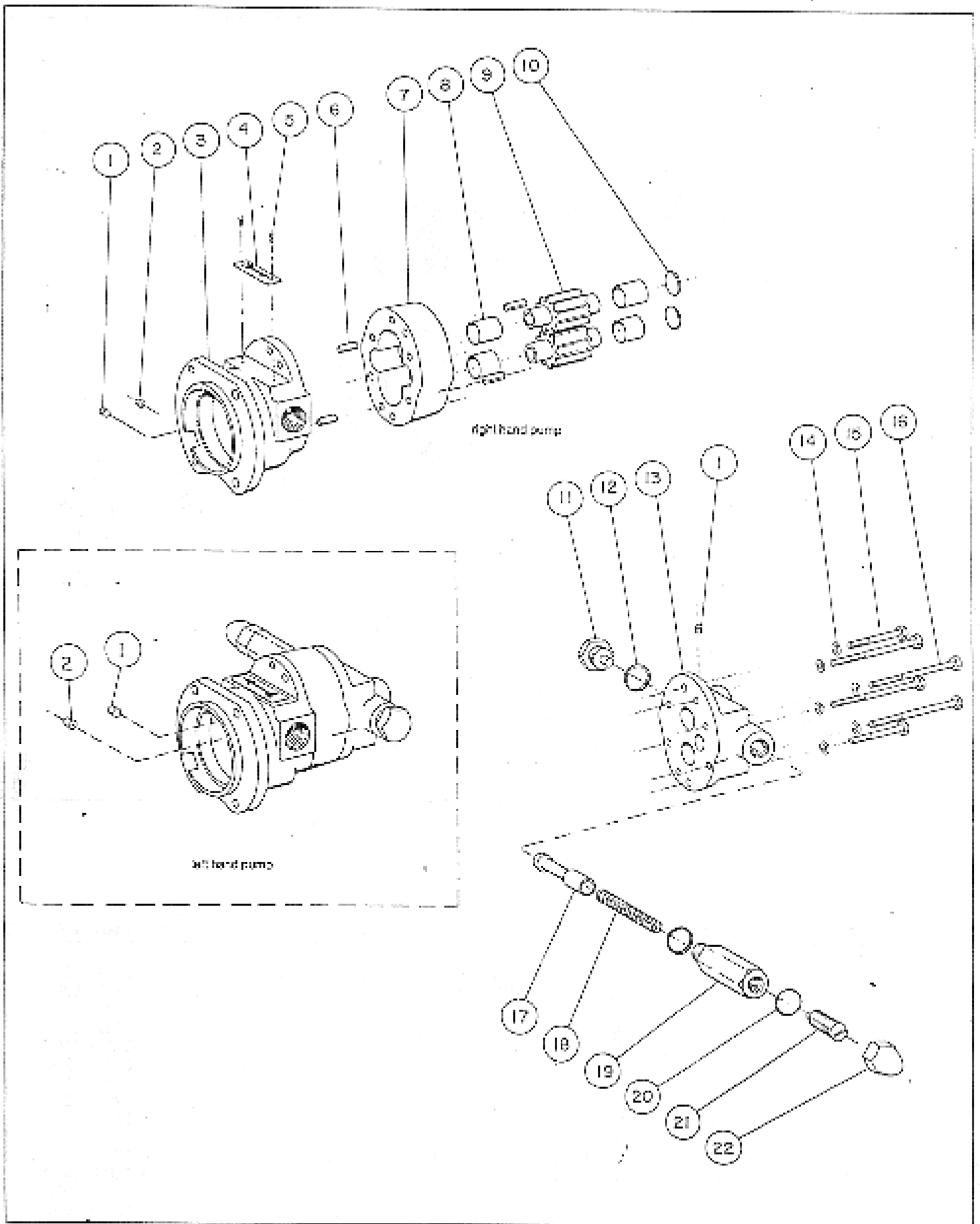


Fig. 41. Oil Pump Assembly

## 7.4 OIL PUMP

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	OIL PUMP ASSEMBLY, RIGHT HAND	1-13410-0100	1
REF.	OIL PUMP ASSEMBLY, LEFT HAND	1-13410-0200	1
1	PLUG, PIPE (STANDARD)	1-11279-0100	2
2	PLUG, PIPE .052 ORIFICE	1-13414-0000	1
3	ADAPTER, PUMP	1-13411-0000	1
4	PLATE, ROTATION	1-11212-0000	1
5	SCREW, DRIVE #2X 3/16" LG	1-13275-0000	2
6	PIN, SPRING 1/4" X 3/4" LG	1-12097-1200	4
7	BODY, PUMP	1-10242-0000	1
8	BUSHING	1-11125-0000	4
9	GEAR, PUMP	1-10254-0200	2
10	DISC, FLAT 7/8" DIA X .074"	1-13731-0000	2
11	STOP, RELIEF	1-10285-0100	1
12	WASHER, COPPER	1-10288-0700	2
13	COVER, PUMP	1-10243-0300	1
14	LOCKWASHER	1-05309-0800	6
15	CAPSCREW, HEX HEAD 1/4-20X2"	1-11512-0000	2
16	CAPSCREW, HEX HEAD 1/4-20X3 1/4"	1-10252-0000	4
17	PLUNGER, RELIEF	1-10258-0300	1
18	SPRING, PRESSURE RELIEF	1-13413-0000	1
19	INSERT, RELIEF VALVE	1-13412-0000	1
20	WASHER, COPPER	1-12602-0000	1
21	SCREW, PRESSURE RELIEF	1-06660-0800	1
22	NUT, DOME	1-06667-0800	1

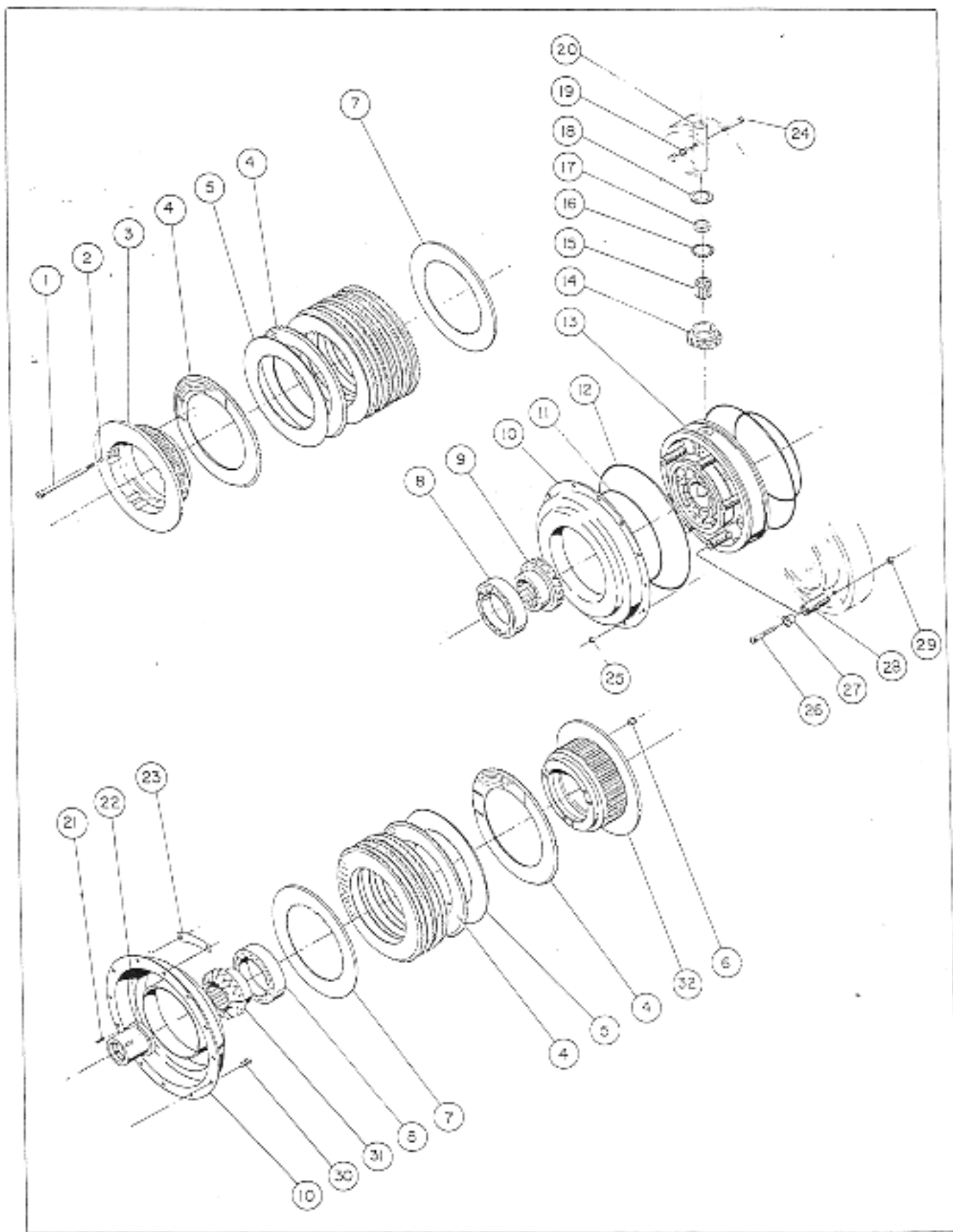


Fig. 42. Gear Case and Clutch Assembly

## 7.5 GEAR CASE AND CLUTCH

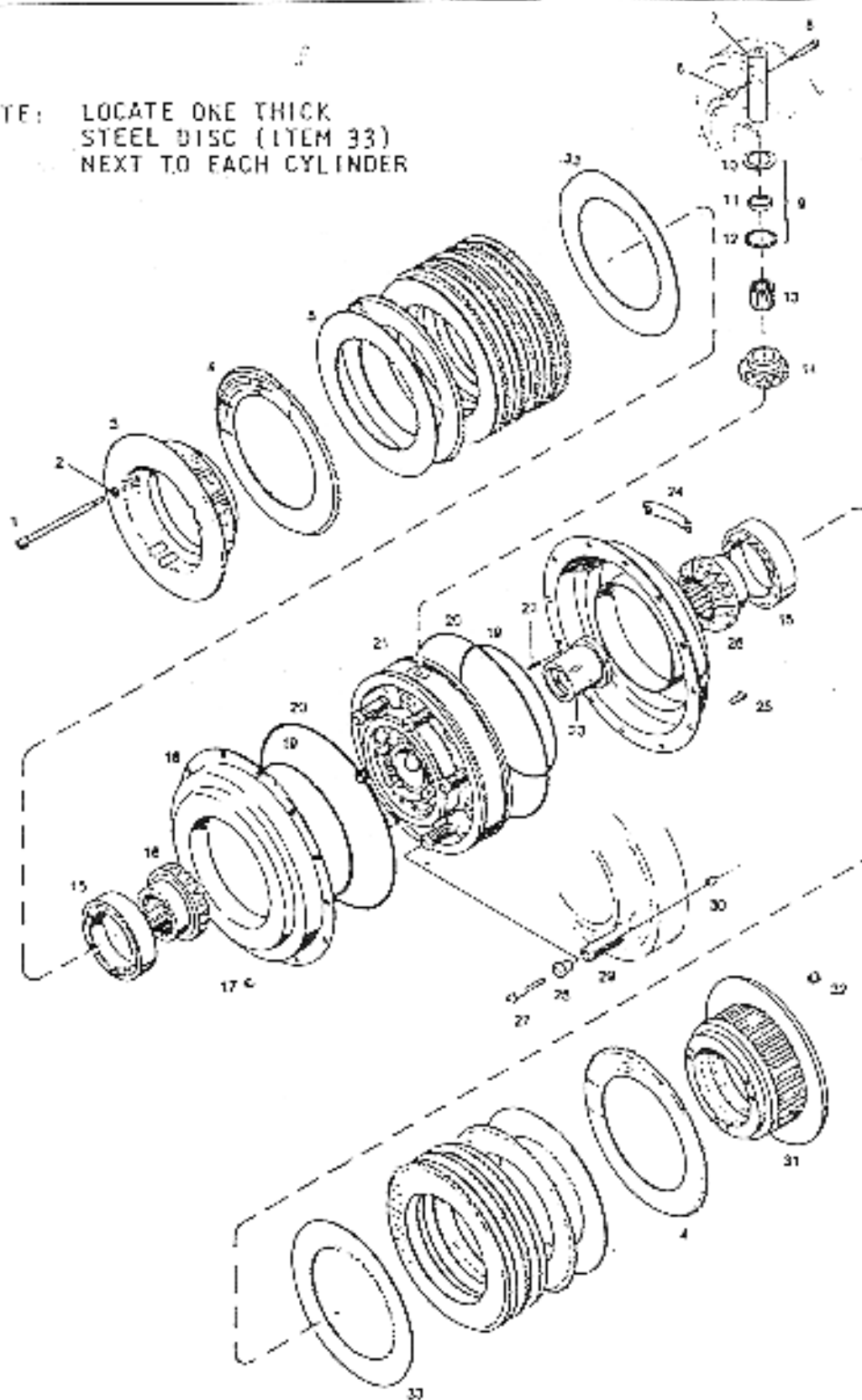
### PARTS LIST

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	ASSEMBLY CLUTCH- 4HE	1-00100-1102	1
1	CAPSCREW	1-12732-0000	6
2	LOCKWASHER, HIGH COLLAR	1-01104-1600	6
3	CLUTCH FLANGE, FORWARD	1-00212-1700	1
4	DISC, CLUTCH DRIVING	1-00230-2000	12
5	DISC, CLUTCH DRIVEN	1-00233-0700	10
6	ALLENUT, STANDARD	1-12733-0000	6
7	DISC, CLUTCH DRIVEN	1-00229-1700	2
8	BEARING	1-12364-0000	2
9	GEAR, DRIVING	1-00215-0900	1
10	CYLINDER	1-00234-8500	2
11	QUAD RING	1-00238-1500	2
12	QUAD RING	1-00237-1500	2
13	CARRIER, BEVEL GEAR	1-00219-1800	1
14	BEVEL GEAR, PINION	1-00217-1700	3
15	BEARING, NEEDLE	1-12367-0000	3
16	BEARING, NEEDLE THRUST	1-12368-0000	3
17	WASHER, PILOT	1-12366-0000	3
18	WASHER, THRUST	1-12369-0000	3
19	NUT, FLEXLOC	1-11105-0000	3
20	SHAFT, PINION	1-00214-1800	3
21	PIN, SPRING	1-12095-1200	2
22	BUSHING, FORWARD COMMUTATOR	1-00247-1800	1
23	NAMEPLATE	1-13430-0200	1
24	CAPSCREW, SOCKET HEAD	1-11104-0000	3
25	NUT, SELF-LOCKING FLEXLOC	1-00226-3600	12
26	CAPSCREW, SOCKET HEAD	1-07837-0800	12
27	RETAINER, RETURN SPRING	1-00243-3500	12
28	SPRING, RETURN	1-00239-1500	12
29	NUT, FLEXLOC	1-07846-0800	12
30	CAPSCREW, SOCKET HEAD	1-13424-0000	12
31	GEAR, DRIVEN	1-00215-1800	1
32	CLUTCH FLANGE, REVERSE	1-00212-6100	1

HE 10200 & HE 10700 CLUTCH ASSEMBLY  
 WITH FINE TOOTH BEVEL GEARS  
 P/N 1-00100-1001

NOTE: LOCATE ONE THICK  
 STEEL DISC (ITEM 33)  
 NEXT TO EACH CYLINDER

this end  
 toward  
 engine



Clutch No. 1-00100-1001

HE 10200 & HE 10700 CLUTCH ASSEMBLY  
 WITH FINE TOOTH BEVEL GEARS  
 P/N 1-00100-1001

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	CLUTCH ASSEMBLY	1-00100-1001	1
1	CAPSCREW, SOCKET HEAD	1-12732-0000	6
2	LOCKWASHER, HIGH COLLAR; 5/16" I.D	1-01104-1600	6
3	CLUTCH FLANGE, FORWARD	1-00212-1700	1
4	DISC, CLUTCH DRIVING	1-00230-2000	12
5	DISC, CLUTCH DRIVEN	1-00233-0700	10
6	NUT, SELF-LOCKING	1-11105-0000	3
7	SHAFT, PINION	1-00214-1800	1
8	CAPSCREW, SOCKET HEAD	1-11104-0000	3
9	SUB-ASSEMBLY, BEARING	1-12434-0000	3
10	WASHER, THRUST	1-12369-0000	3
11	WASHER, PILOT	1-12366-0000	3
12	BEARING, NEEDLE	1-12368-0000	3
13	BEARING, NEEDLE	1-12367-0000	3
14	PINION, BEVEL	1-00217-1000	3
15	BEARING	1-12364-0000	2
16	GEAR, DRIVING	1-00215-1000	1
17	NUT, SELF-LOCKING; 1/4-28 NF	1-00226-03600	12
18	CYLINDER	1-00234-8400	2
19	QUAD RING	1-00238-1500	2
20	QUAD RING	1-00237-1500	2
21	CARRIER BEVEL GEAR	1-00219-1800	1
22	SPRING PIN 1/8" DIA. X 3/4" LG	1-12095-1200	2
23	BUSHING, FORWARD COMMUTATOR	1-00247-1800	1
24	NAME PLATE	1-13430-0000	1
25	CAPSCREW, SOCKET HD; 1/4-28X 5/8" LG	1-13424-0000	12
26	GEAR, DRIVEN	1-00215-2000	1
27	CAPSCREW, SOCKET HD; 1/4-20X11/2" LG	1-07837-0800	12
28	RETAINER, RETURN SPRING	1-00243-3500	12
29	SPRING, RETURN	1-00239-1500	12
30	NUT, SELF-LOCKING; 1/4-20	1-07846-0800	12
31	CLUTCH FLANGE, REVERSE	1-00212-6100	1
32	ALLENUT, STANDARD; 5/16-24	1-12733-0000	6
33	DISC, CLUTCH DRIVEN	1-00229-1700	2

**\*NOTE:** ITEMS 21, 22 AND 23 ARE AVAILABLE AS PART NUMBER 1-00219-4400 GEAR CASE ASSEMBLY

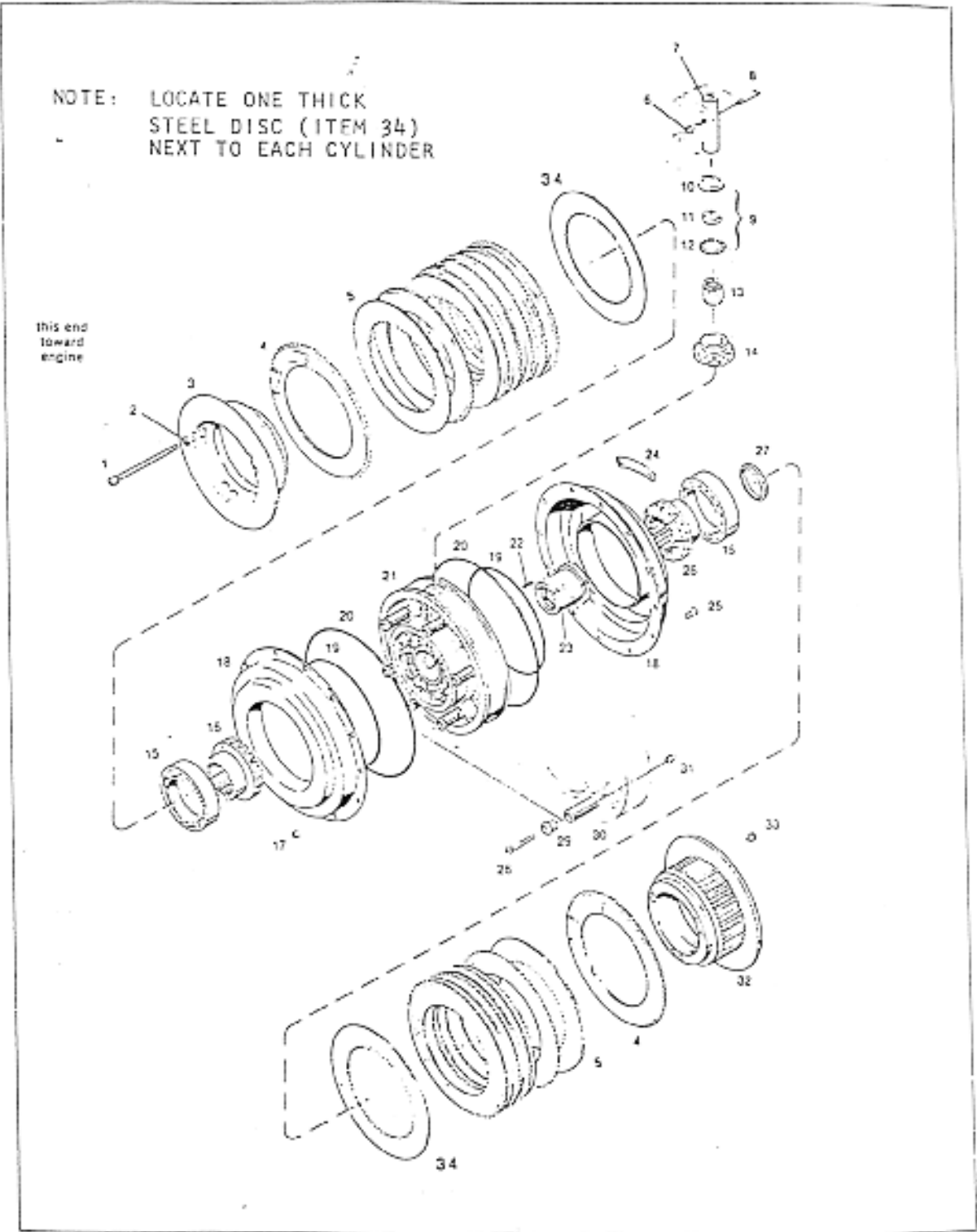
**IMPORTANT PARTS REPLACEMENT INFORMATION**

19 tooth bevel pinions (No. 1-00217-1000) will run only with 27 tooth driving gear (1-00215-1000) and 27 tooth driven gear (1-00215-2000).

15 tooth bevel pinions (No. 1-00217-1700) will run only with 21 tooth driving gear (No. 1-00215-0900) and 21 tooth driven gear (No. 1-00215-1800).



CLUTCH ASSEMBLY WITH SPACER RING  
CLUTCH NO. 1-00100-1002



Clutch No. 1-00100-1002

HE 10200 & HE 10700 CLUTCH ASSEMBLY  
 WITH FINE TOOTH BEVEL GEARS  
 P/N 1-00100-1001

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	CLUTCH ASSEMBLY WITH SPACER RING	1-00100-1001	1
1	CAPSCREW, SOCKET HEAD	1-12732-0000	6
2	LOCKWASHER, HIGH COLLAR; 5/16" I.D	1-01104-1600	6
3	CLUTCH FLANGE, FORWARD	1-00212-1700	1
4	DISC, CLUTCH DRIVING	1-00230-2000	12
5	DISC, CLUTCH DRIVEN	1-00233-0700	10
6	NUT, SELF-LOCKING	1-11105-0000	3
7	SHAFT, PINION	1-00214-1800	1
8	CAPSCREW, SOCKET HEAD	1-11104-0000	3
9	SUB-ASSEMBLY, BEARING	1-12434-0000	3
10	WASHER, THRUST	1-12369-0000	3
11	WASHER, PILOT	1-12366-0000	3
12	BEARING, NEEDLE THRUST	1-12368-0000	3
13	BEARING, NEEDLE	1-12367-0000	3
14	PINION, BEVEL	1-00217-1000	3
15	BEARING	1-12364-0000	2
16	GEAR, DRIVING	1-00215-1000	1
17	NUT, SELF-LOCKING; 1/4-28 NF	1-00226-03600	12
18	CYLINDER	1-00234-8400	2
19	QUAD RING	1-00238-1500	2
20	QUAD RING	1-00237-1500	2
21	CARRIER BEVEL GEAR	1-00219-1800	1
22	SPRING PIN 1/8" DIA. X 3/4" LG	1-12095-1200	2
23	BUSHING, FORWARD COMMUTATOR	1-00247-1800	1
24	NAME PLATE	1-13430-0000	1
25	CAPSCREW, SOCKET HD; 1/4-28X 5/8" LG	1-13424-0000	12
26	GEAR, DRIVEN	1-00215-2000	1
27	RING, SPACER	1-12530-0000	1
28	CAPSCREW, SOCKET HD; 1/4-20X1 1/2" LG	1-07837-0800	12
29	RETAINER, RETURN SPRING	1-00243-3500	12
30	SPRING, RETURN	1-00239-1500	12
31	NUT, SELF-LOCKING; 1/4-20	1-07846-0800	12
32	CLUTCH FLANGE, REVERSE	1-00212-6100	1
33	ALLENUT, STANDARD; 5/16-24	1-12733-0000	6
34	DISC, CLUTCH DRIVEN	1-00229-1700	2

**\*NOTE:** ITEMS 21, 22 AND 23 ARE AVAILABLE AS PART NUMBER 1-00219-4400 GEAR CASE ASSEMBLY

**IMPORTANT PARTS REPLACEMENT INFORMATION**

19 tooth bevel pinions (No. 1-00217-1000) will run only with 27 tooth driving gear (1-00215-1000) and 27 tooth driven gear (1-00215-2000).

15 tooth bevel pinions (No. 1-00217-1700) will run only with 21 tooth driving gear (No. 1-00215-0900) and 21 tooth driven gear (No. 1-00215-1800).

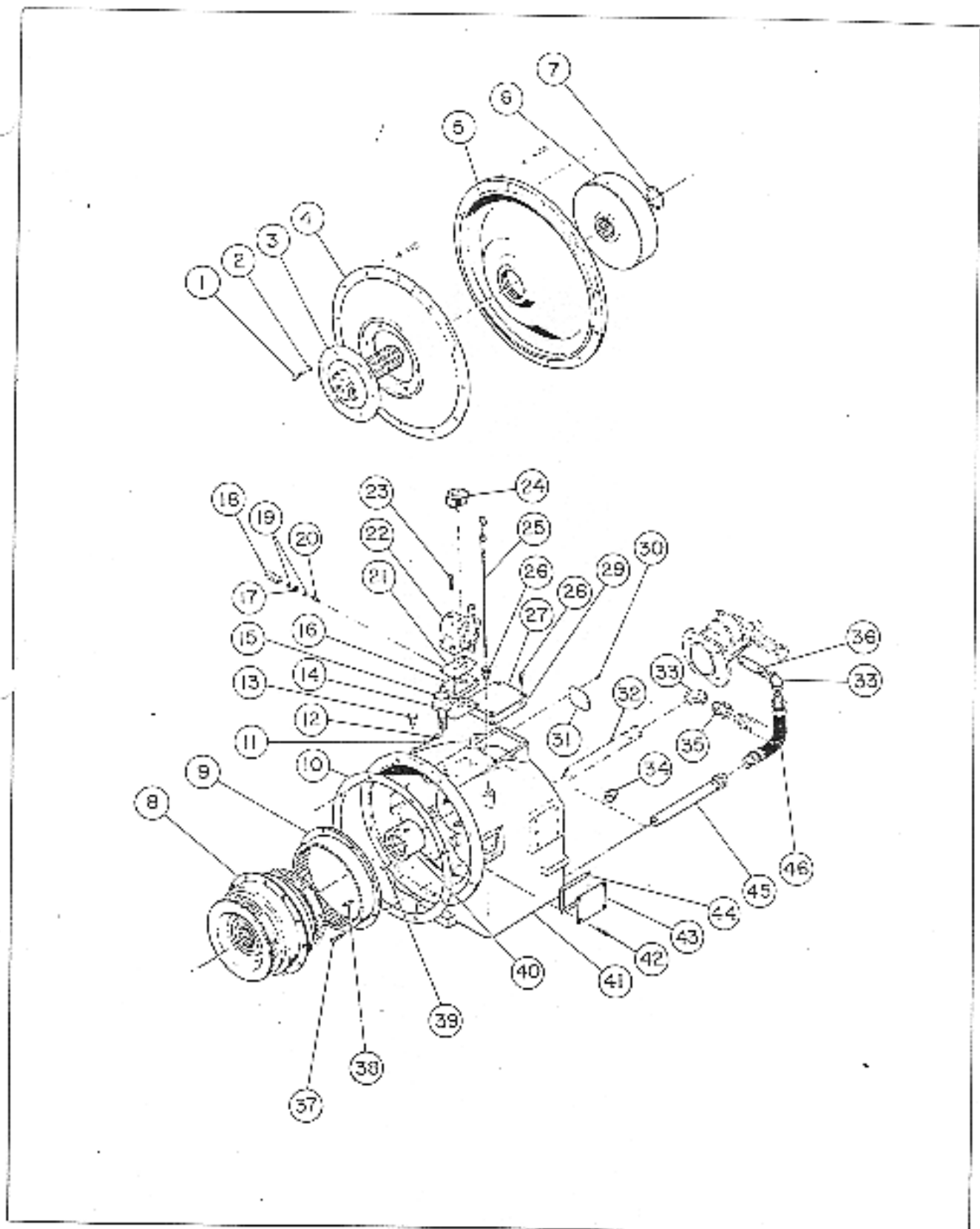


Fig. 43A. Marine Gear Assembly

## 7.6 MARINE GEAR ASSEMBLY

HE-10200 & HE-10700\*

ITEM	DESCRIPTION	PART NUMBER	QTY
1	HEX HEAD CAPSCREW	see table of adaptations	6
2	LOCKWASHER	see table of adaptations	6
3	FLANGE AND SHAFT ASSEMBLY	see table of adaptations	1
4	FLYWHEEL ADAPTER	see table of adaptations	1
5	OIL DAM	see table of adaptations	1
6	DRUM, CLUTCH DRIVING	1-01116-1800	1
7	SNAP RING (SPIROLOX)	1-01151-1500	1
8	ASSEMBLY, CLUTCH (4HE)	1-00100-1102	1
	ASSEMBLY, CLUTCH (2HEC)(OLD STYLE)	1-00100-1107	1
	ASSEMBLY, CLUTCH, PTO W/BRAKE	1-00100-1103	1
	ASSEMBLY, CLUTCH, PTO W/BRAKE	1-00100-1104	1
9	DRUM, REVERSE CLUTCH	1-00250-1600	1
10	GASKET, HOUSING TO OIL DAM	1-10277-0000	1
11	LOCKWASHER	1-09460-0800	8
12	CAPSCREW, HEX HEAD 3/8-16 11/4"LG	1-06751-0800	8
13	CAPSCREW, HEX HEAD	1-11649-0000	1
14	GASKET, BASEPLATE TO HOUSING	1-01169-1500	1
15	BREATHER	1-01124-1300	1
16	BASEPLATE, VALVE	1-01150-1600	1
17	LOCKNUT	1-09464-0800	1
18	DOME NUT	1-09461-0800	1
19	GASKET	1-09471-0800	2
20	SCREW, TIMING	1-09466-0800	1
21	GASKET, BASEPLATE	1-01154-1500	1
22	ASSEMBLY, CONTROL VALVE	1-01175-1500	1
23	CAPSCREW, HEX HEAD	1-07229-0800	4
24	GAUGE, PRESSURE	1-09669-0900	1
25	DIP STICK	(10200) 1-10213-0100 (10700) 1-10734-0100	1
26	FLARE NUT	1-11227-0400	1
27	COVER, INSPECTION	1-12405-0000	1
28	CAPSCREW HEX HEAD	1-10836-0000	4
29	GASKET, INSPECTION COVER	1-12438-0000	1
30	SCREW, ROUND HEAD DRIVE	1-13275-0000	2
31	NAME PLATE	1-11210-0000	1
32	SUCTION SCREEN & PIPE NIPPLE	1-13336-0000	1
33	ELBOW, 90 DEGREE	1-11246-0500	2
34	PLUG, SQUARE HEAD	1-11251-0500	1
35	PIPE CONNECTOR, 3/4-14	1-11268-0400	1
36	NIPPLE, LONG; 3/4-14, 2 1/2 LG	1-11259-0600	1
37	SEMS SCREW, PHILLIPS HEAD; 5/16-18NCX1"LG	1-01307-1400	8
38	SPRING PIN; 3/8" DIA. X 1" LG	1-12098-1600	2
39	SPRING PIN; 3/16" DIA. X 3/4" LG	1-12096-1200	1
40	BUSHING ASSEMBLY, REAR COMMUTATOR	1-00248-2100	1
41	HOUSING, (NON-IDLER; ALL RATIOS EXCEPT 1 TO 1)	1-12327-2500	1
	HOUSING, (WITH-IDLER; 1 TO 1 RATIO)	1-12443-0400	1
	HOUSING, (NON-IDLER; 1 TO 1 RATIO)	1-12327-0000	1
(10200)	HOUSING, (WITH-IDLER; 11/2 TO 1 RATIO)	1-12328-0400	1
	HOUSING, (WITH IDLER; 2 TO 1 RATIO)	1-12329-0400	1
	HOUSING, (WITH IDLER 3 TO 1)	1-10722-0400	1
	HOUSING, (WITH IDLER, 2 1/2 TO 1)	1-10724-0400	1
(10700)	HOUSING, (WITH IDLER, 3 1/2 TO 1)	1-10732-0400	1
	HOUSING,( WITH IDLER, 4 TO 1)	1-10742-0400	1
	HOUSING, (NON-IDLER, ALL RATIOS)	1-10702-2500	1
42	CAPSCREW, HEX HEAD; 1/4-20 NC X 1/2"	1-08087-0800	8
43	COVER, INSPECTION	1-01103-1500	2
44	GASKET, INSPECTION	1-01131-1500	2
45	SUCTION SCREEN & SWIVEL CONNECTOR	1-13337-0000	1
46	HOSE ASSEMBLY, SUMP TO PUMP	(10200) 1-13334-0000 (10700) 1-13341-0000	1

\*unless otherwise indicated part numbers apply to both HE models.

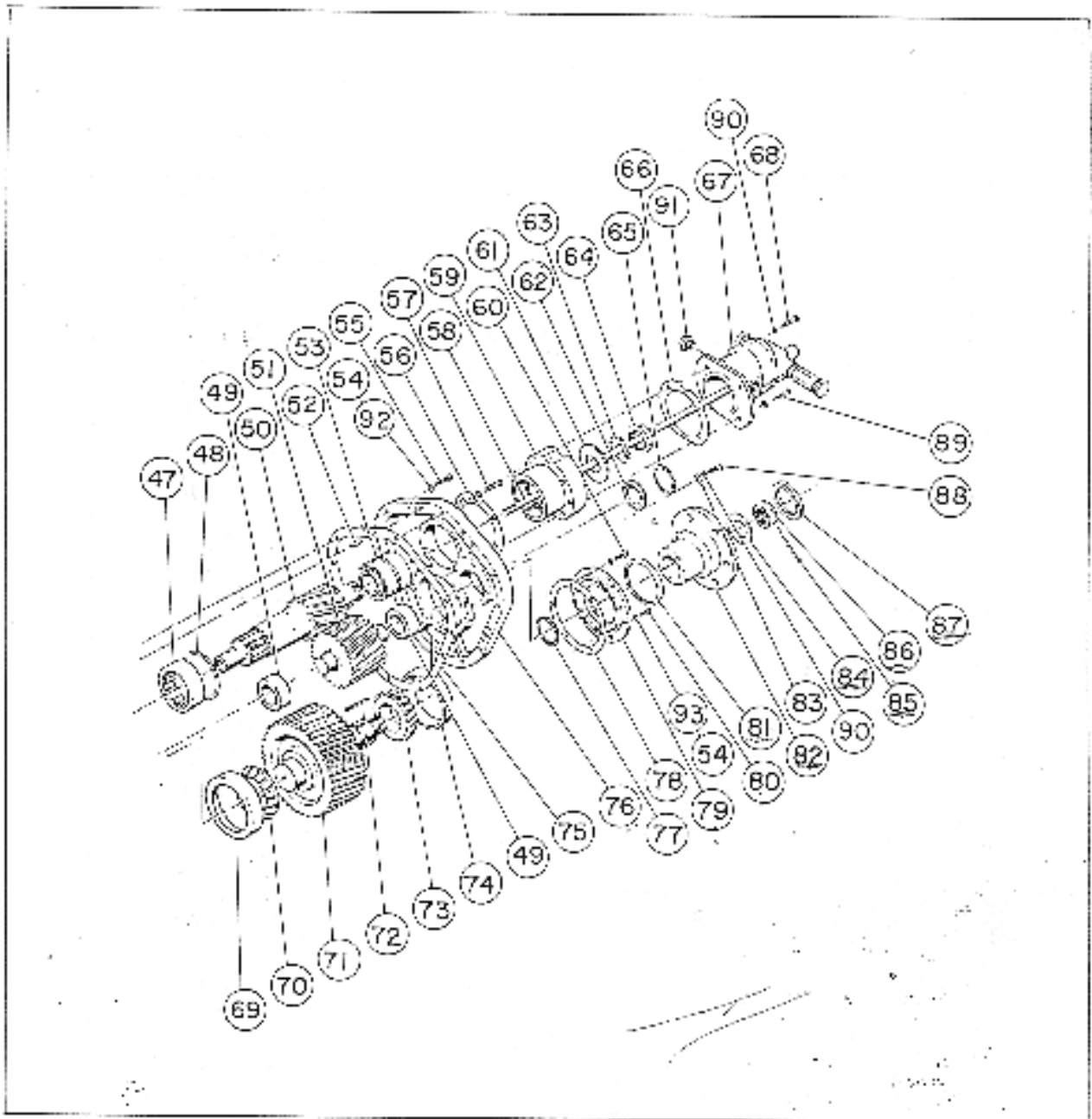


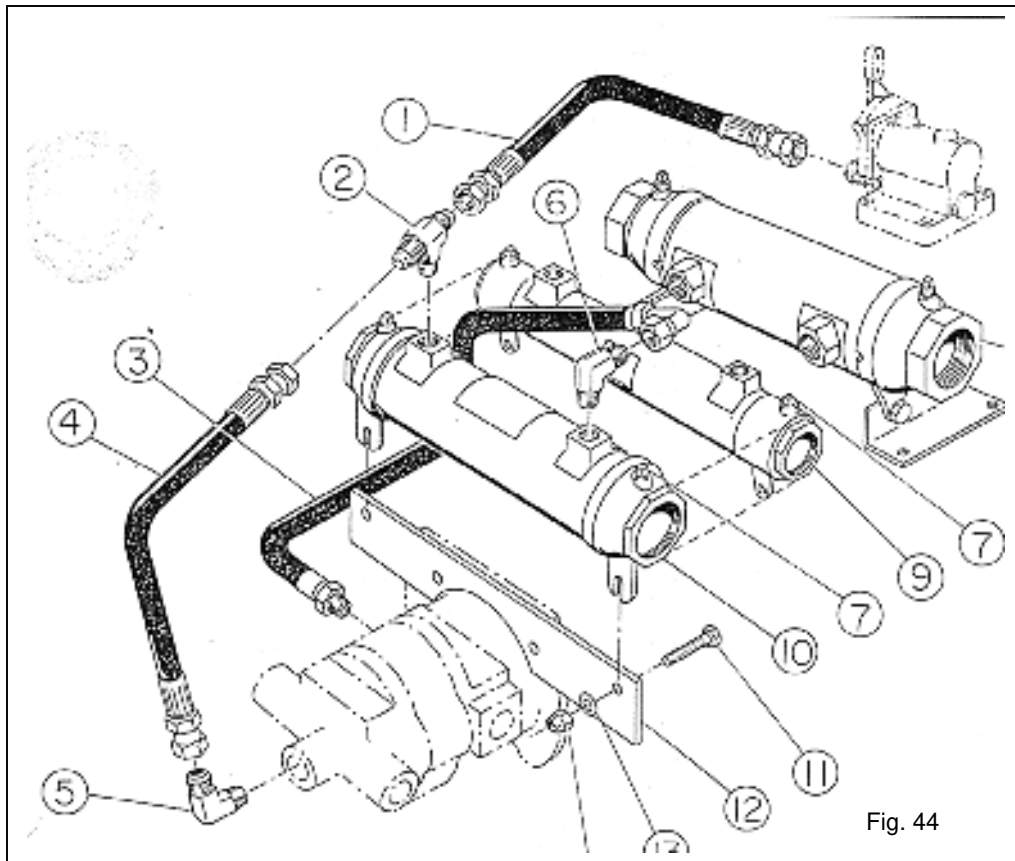
Fig. 43B Marine Gear Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY
47	BEARING, PINION SHAFT	1-10261-0000	1
48	SNAP RING, SPIROLOX	1-10263-0000	1
49	BEARING	1-10281-0000	2
50	ASSEMBLY, PINION & SHAFT (21/2 TO 1, LESS IDLER, 16 TEETH)	1-12333-2600	1
	ASSEMBLY, PINIONS & SHAFT (2 TO 1, LESS IDLER, 18 TEETH)	1-13156-0100	1
	ASSEMBLY, PINION & SHAFT (11/2 TO 1, LESS IDLER, 22 TEETH)	1-12427-2600	1

		ASSEMBLY, PINION & SHAFT (13/4 TO 1 LESS IDLER, 20 TEETH)	1-12334-2600	1
		ASSEMBLY, PINION& SHAFT (2 TO 1, WITH IDLER, 17 TEETH)	1-12335-2600	1
(10200)		ASSEMBLY, PINION & SHAFT (1 TO 1, LESS IDLER, 27 TEETH)	1-12372-2600	1
		ASSEMBLY, PINION & SHAFT (1 TO 1, WITH IDLER, 24 TEETH)	1-12346-2600	1
		ASSEMBLY, PINION & SHAFT (11/2 TO 1, WITH IDLER, 20 TEETH)	1-12334-2600	1
		ASSEMBLY, PINION & SHAFT (3 TO 1, LESS IDLER, 14 TEETH)	1-12963-2600	1
		ASSEMBLY, PINION & SHAFT (2/12 TO 1, LESS IDLER, 24 TEETH)	1-12346-2600	1
		ASSEMBLY, PINION & SHAFT (3 TO 1, LESS IDLER, 21 TEETH)	1-12347-2600	1
		ASSEMBLY, PINION & SHAFT (31/2 TO 1, LESS IDLER, 66 TEETH)	1-12348-2600	1
(10700)		ASSEMBLY, PINION & SHAFT (4 TO 1 LESS IDLER, 68 TEETH)	1-12335-2600	1
		ASSEMBLY, PINION & SHAFT (3 TO 1 WITH IDLER, 20 TEETH)	1-12334-2600	1
		ASSEMBLY, PINION & SHAFT (31/2 TO 1 WITH IDLER, 18 TEETH)	1-12426-2600	1
		ASSEMBLY, PINION & SHAFT (4 TO 1 WITH ILDER, 16 TEETH).	1-12333-2600	1
		ASSEMBLY, PINION & SHAFT (21/2 TO 1, WITH IDLER 23 TEETH	1-12345-2600	1
51		ILDER & SHAFT	1-10267-0100	1
52		DOWEL PIN, 3/8 DIA X 1" LG	1-11371-0000	3
53		BEARING ASSEMBLY	1-12430-0000	1
54		LOCKWASHER, 5/16" DIA (10200)	1-09458-0800	20
55		CAPSCREW, HEX HEAD; 5/16-18NCX 1/1/2 LG (10200)	1-1-11365-0000	13
		CAPSCREW, HEX HEAD; 3/8-16NCX1/1/2LG (10700)	1-07926-0800	13
56		GASKET, BEARING RETAINER	1-12408-0000	1
57		CAPSCREW, HEX HEAD 5/16-18 NCX2" LG (10200)	1-11995-0000	1
		CAPSCREW, HEX HEAD; 3/8-16NCX2' LG (10700)	1-09662-0800	1
58		SHAFT PUMP DRIVE	1-12412-0000	1
59		ASSEMBLY, BEARING RETAINER	1-12424-2600	1
60		CAPSCREW, SOCKET HEAD; 5/16'-18x11/4 LG	1-07951-0800	2
61		WASHER, KEYED	1-12437-0000	1
62		END PLUG	1-12325-0000	1
63		LOCKWASHER, BEARING	1-12371-0000	1
64		NUT, BEARING	1-09316-0800	1
65		'O' RING	1-12326-0000	1
66		GASKET, OIL PUMP ADAPTER	1-12414-0000	1
67		ASSEMBLY, OIL PUMP-RIGHT HAND	1-13410-0100	1
		ASSEMBLY, OIL PUMP- LEFT HAND	1-13410-0200	1
68		CAPSCREW, HEX HEAD; 5/16-18 NCX2/14 LG	1-12452-0000	2
69		CUP, BEARING (10200)	1-12431-0100	1
		(10700)	1-06725-0900	1
70		CONE, BEARING (10200)	1-12431-0200	1
		(10700)	1-06725-1000	1
71		GEAR AND SHAFT (2 TO 1 LESS IDLER 36 TEETH)	1-13155-0000	1
		GEAR AND SHAFT (1 1/2 TO 1 LESS IDLER 33 TEETH)	1-12429-0000	1
		GEAR AND SHAFT (1 TO 1 LESS IDLER 39 TEETH)	1-12336-0000	1
		GEAR AND SHAFT (1 TO 1 LESS IDLER 28 TEETH)	1-12373-0000	1
(10200)		GEAR AND SHAFT (2 TO 1 WITH IDLER 34 TEETH)	1-12338-0000	1
		GEAR AND SHAFT (11/2 TO 1 WITH IDLER 30 TEETH)	1-12337-0000	1
		GEAR AND SHAFT (13/4 TO 1 LESS IDLER 35 TEETH)	1-12455-0000	1
		GEAR AND SHAFT (1 TO 1 WITH IDLER 26 TEETH)	1-12442-0000	1

		GEAR AND SHAFT (3 TO 1 LESS IDLER 41 TEETH)	1-12964-0000	1
		GEAR AND SHAFT (2 1/2 TO 1, LESS IDLER 61 TEETH)	1-10739-0300	1
		GEAR AND SHAFT (3 TO 1, LESS IDLER 64 TEETH)	1-10707-0300	1
		GEAR AND SHAFT (3 1/2 TO 1, LESS IDLER 66 TEETH)	1-10709-0300	1
	(10700)	GEAR AND SHAFT (4 TO 1, LESS IDLER 68 TEETH)	1-10711-0300	1
		GEAR AND SHAFT (3 TO 1, WITH IDLER 60 TEETH)	1-10713-0300	1
		GEAR AND SHAFT (3 1/2 TO 1, WITH IDLER 62 TEETH)	1-10715-0300	1
		GEAR AND SHAFT (4 TO 1, WITH IDLER 64 TEETH)	1-10717-0300	1
		GEAR AND SHAFT (2 1/2 TO 1, WITH IDLER 57 TEETH)	1-10737-0300	1
72		KEY, STRAIGHT, 1/4 "X1/4"X2" LG	1-10235-0000	1
73		CONE, BEARING (10200)	1-12432-0200	1
		(10700)	1-06726-1000	1
74		CUP, BEARING (10200)	1-12432-0100	1
		(10700)	1-06725-0900	1
75		GASKET, HOUSING COVER (10200)	1-10278-0000	1
		(10700)	1-10735-1000	1
76		COVER, (1 1/2 TO 1 WITH IDLER)	1-12331-0400	1
	(10200)	COVER, (2 TO 1 WITH IDLER)	1-12332-0400	1
		COVER, (1 TO 1 WITH IDLER)	1-12444-0400	1
		COVER, (NON-IDLER)	1-12330-2500	1
		COVER, (3 TO 1 WITH IDLER)	1-12341-0400	1
		COVER, (2 1/2 TO 1 WITH IDLER)	1-12342-0400	1
	(10700)	COVER, (3 1/2 TO 1 WITH IDLER)	1-12343-0400	1
		COVER, (4 TO 1 WITH IDLER)	1-12344-0400	1
		COVER, (NON-IDLER)	1-12340-2500	1
77		SEAL RING, DRIVEN GEAR SHAFT	1-12446-0000	1
78		SHIM PACK (10200)	1-12409-2600	1
		(10700)	1-03755-3400	1
79		RETAINER, BEARING CAP & SEAL (10200)	1-12406-0000	1
		(10700)	1-06718-1200	1
80		CAPSCREW, HEX HEAD; 5/16-18 NCX1/14" LG (10200)	1-12339-0000	4
		CAPSCREW, HEX HEAD; 1/2-13 NC X 1 1/2" LG (10700)	1-09141-0800	6
81		OIL SEAL (10200)	1-12974-0000	1
		(10700)	1-12976-0000	1
82		COUPLING, OUTPUT SHAFT (10200)	1-12407-0000	1
		(10700)	1-06722-1000	1
83		WASHER, WROUGHT	1-10388-0000	1
84		WASHER, OUTPUT SHAFT (10200)	1-12375-0000	1
		(10700)	1-06745-0800	1
85		COTTER PIN (10200)	1-12769-5500	1
		(10700)	1-06746-0800	1
86		NUT, CASTLE (10200)	1-10231-0000	1
		(10700)	1-06744-0800	1
87		PILOT RING (10200)	1-10222-0000	1
		(10700)	1-01175-0400	1
88		CAPSCREW, HEX HEAD; 5/16-18NC X 1/2" LG	1-12145-0000	1
89		CAPSCREW, HEX HEAD; 5/16-18NC X 2" LG	1-1195-0000	2
90		LOCKWASHER, 5/16"DIA	1-09458-0800	5
91		BUSHING, REDUCING (3/4" TO 1/2")	1-11253-0000	1
92		LOCKWASHER, 3/8" DIA (10700)	1-09460-0800	14
93		LOCKWASHER, 1/2 "DIA (10700)	1-11083-0000	6

## 7.7 COOLER KITS



A) HE COOLER KITS, LEFT HAND

ITEM	DESCRIPTION	PART NUMBER	QTY
1	HOSE	1-10749-0100	1
2	TEE, BRANCH	1-11219-0600	1
3	HOSE	1-10219-1300	1
4	HOSE	1-10217-0100	1
5	ELBOW	1-11221-1300	1
6	ELBOW, 90°	1-11221-1500	1
7	ZINC PENCIL	1-12445-0400	2
8	ASSEMBLY, OIL COOLER-SEA WATER (INCLUDES ZINC PENCILS)	1-07808-5000	1
9	ASSEMBLY, OIL COOLER-SMALL (INCLUDES ZINC PENCILS)	1-13350-0000	1
(REF. 10	COOLER KIT-SMALL LEFT HAND	1-13350-4100	1)
(REF. 11	ASSEMBLY, OIL COOLER-LARGE (INCLUDES ZINC PENCILS)	1-12445-2100	1
	COOLER KIT-LARGE, LEFT HAND	1-12445-3900	1)
	CAPSCREW	1-00266-0600	2
12	BRACKET	1-12447-0000	1
13	WASHER	1-00671-0800	2
14	NUT, FLEXLOC	1-09474-0800	2



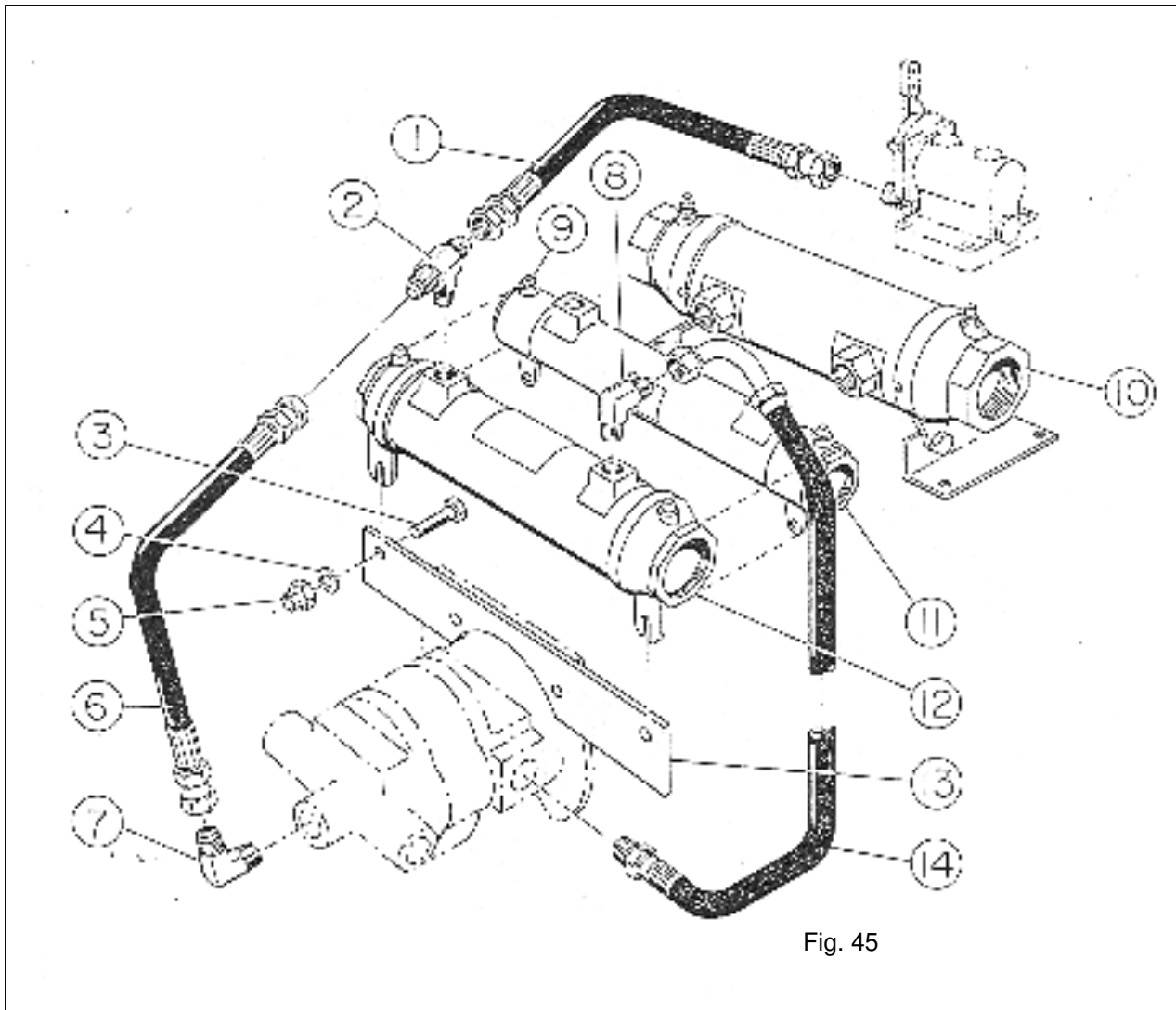


Fig. 45

B) HE COOLER KITS, RIGHT HAND

ITEM	DESCRIPTION	PART NUMBER	QTY
1	HOSE	1-10749-0100	1
2	TEE, BRANCH	1-11219-0600	1
3	CAPSCREW	1-00266-0600	2
4	WASHER	1-06671-0800	2
5	NUT, FLEXLOC	1-09474-0800	2
6	HOSE	1-10217-0100	1
7	ELBOW	1-11221-1300	1
8	ELBOW, 90°	1-11221-1500	1
9	ZINC PENCIL	1-12445-0400	2
10	ASSEMBLY, OIL COOLER-SEA WATER (INCLUDES ZINC PENCIL)	1-07808-5000	1
11	ASSEMBLY, OIL COOLER-SMALL (INCLUDES ZINC PENCIL)	1-13350-0000	1
(REF. 12	COOLER KIT-SMALL, RT.HAND ASSEMBLY, OIL COOLER-LARGE (INCLUDES ZINC PENCIL)	1-13350-4000 1-12445-2100	1) 1
(REF. 13	COOLER KIT-LARGE, RT.HAND	1-12445-4000	1)
14	BRACKET HOSE	1-12447-0000 1-10219-1100	1 1

## 7.8 PROP COUPLING KIT

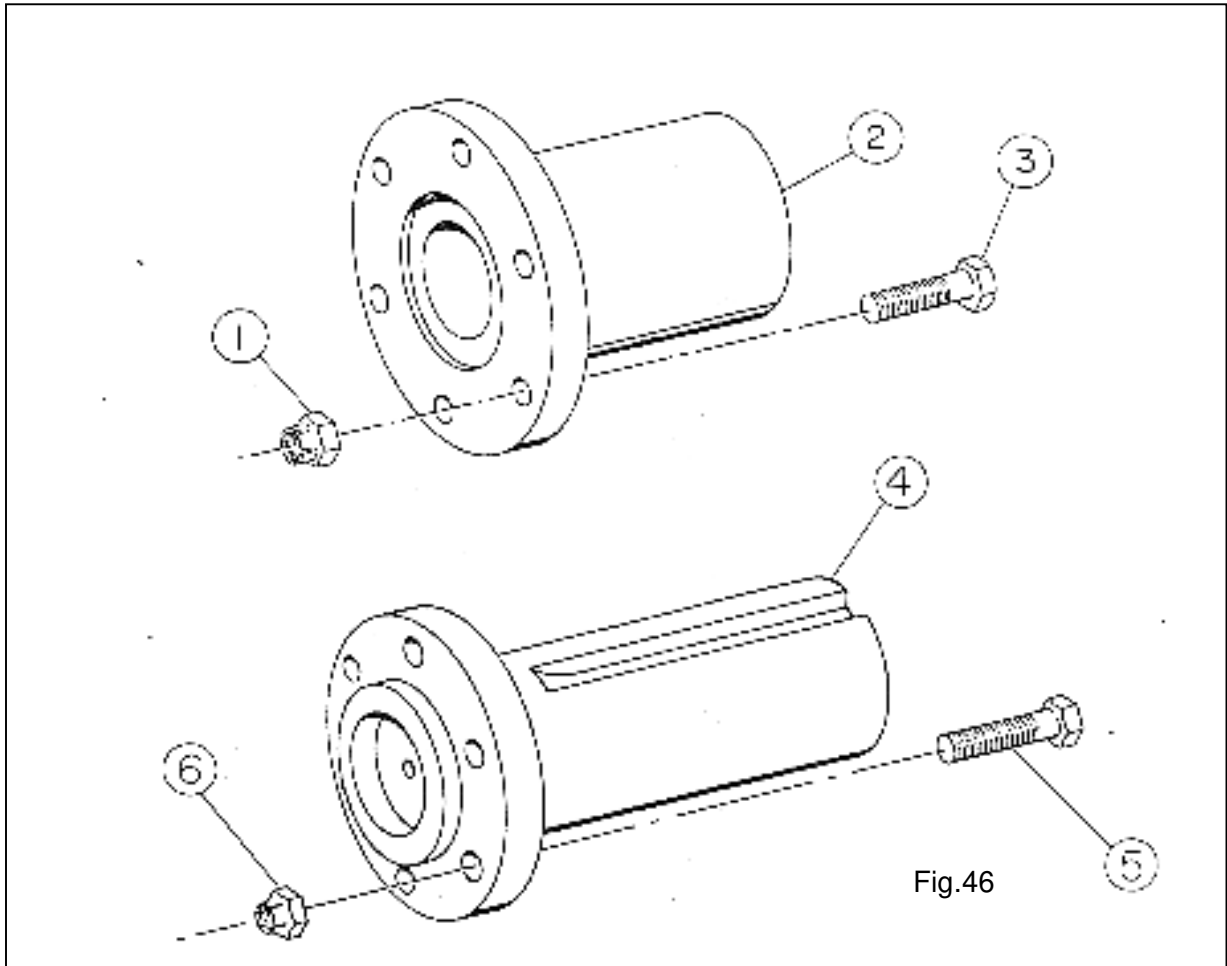
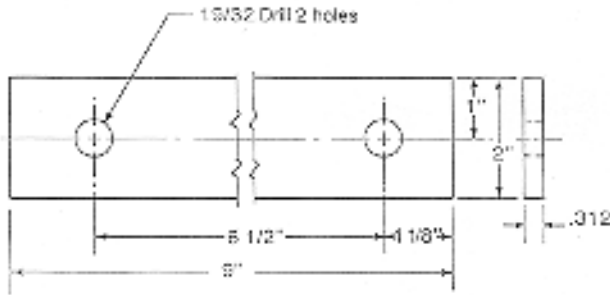


Fig.46

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	ASSEMBLY, PROP COUPLING (10200 ONLY)	1-13691-0000	1
1	HEXNUT, FLEXLOC	1-11389-0000	6
2	COUPLING	1-10221-0000	1
3	CAPSCREW, HEX HEAD	1-10058-0000	6
REF.	ASSEMBLY, PROP COUPLING (10700 ONLY)	1-13578-0000	6
1	HEX NUT, FLEXLOC	1-13304-0000	6
2	COUPLING	1-13494-0000	1
3	CAPSCREW, HEX HEAD	1-07554-0800	6
REF.	ASSEMBLY, KEYED SHAFT KIT (10200 ONLY)	1-13845-0000	1
4	KEYED SHAFT	1-13157-0000	1
5	CAPSCREW, HEX HEAD	1-10058-0000	6
6	NUT, FLEXLOC	1-11389-0000	6
REF.	ASSEMBLY, KEYED SHAFT KIT (10700 ONLY)	1-13846-0000	1
4	KEYED SHAFT	1-12238-0000	1
5	CAPSCREW, HEX HEAD	1-07554-0800	6
6	NUT, FLEXLOC	1-13304-0000	6

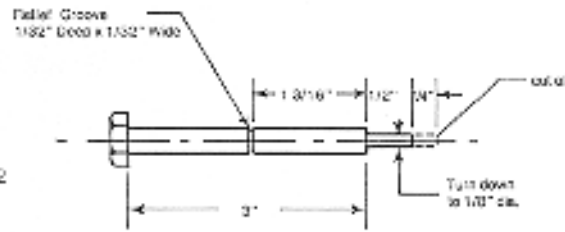
## SECTION 8. SPECIAL TOOLS

Special tools which may be used in repair work for HD units  
 Are shown on the following pages. All pertinent information  
 For fabrication is included. These tools are not normally  
 Available and may only be purchased by special order.



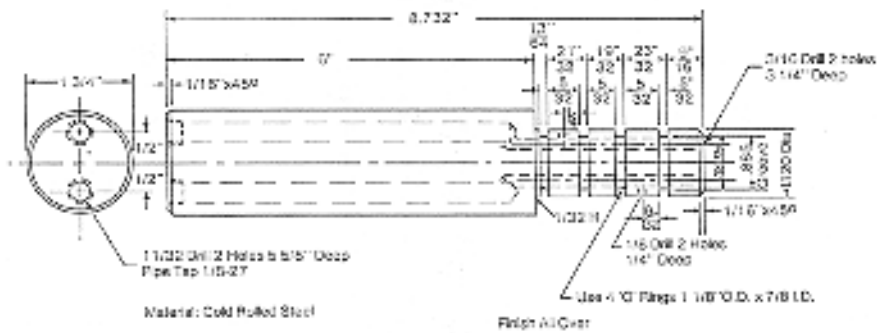
Material: Steel

**Return Spring Height Adjustment Gauge**  
 Special Tool no. 1-90000-0000



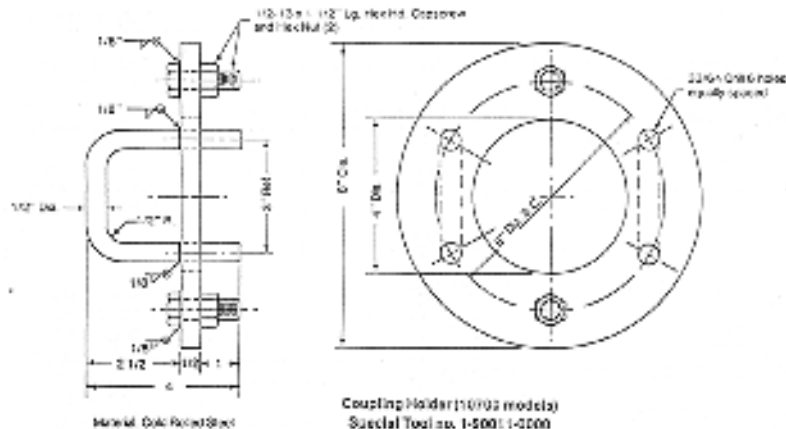
Material: 1/4-20 NC1 x 3 3/4" Lg.  
 Hex Head Capscrew

**Spring Pin Driver**  
 (for oil pump assembly)  
 Special Tool no. 1-90000-0000



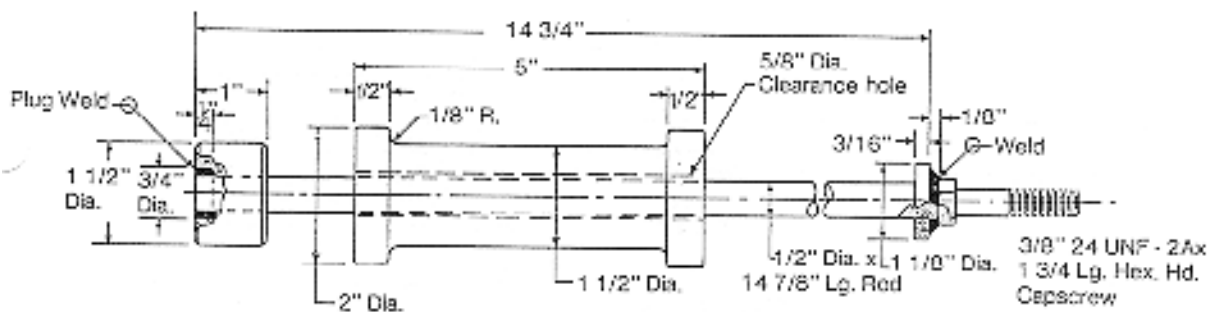
Material: Cold Rolled Steel

**Test Plug for 4HE Clutch Pits**  
 Special Tool no. 1-50012-0100



Material: Cold Rolled Steel

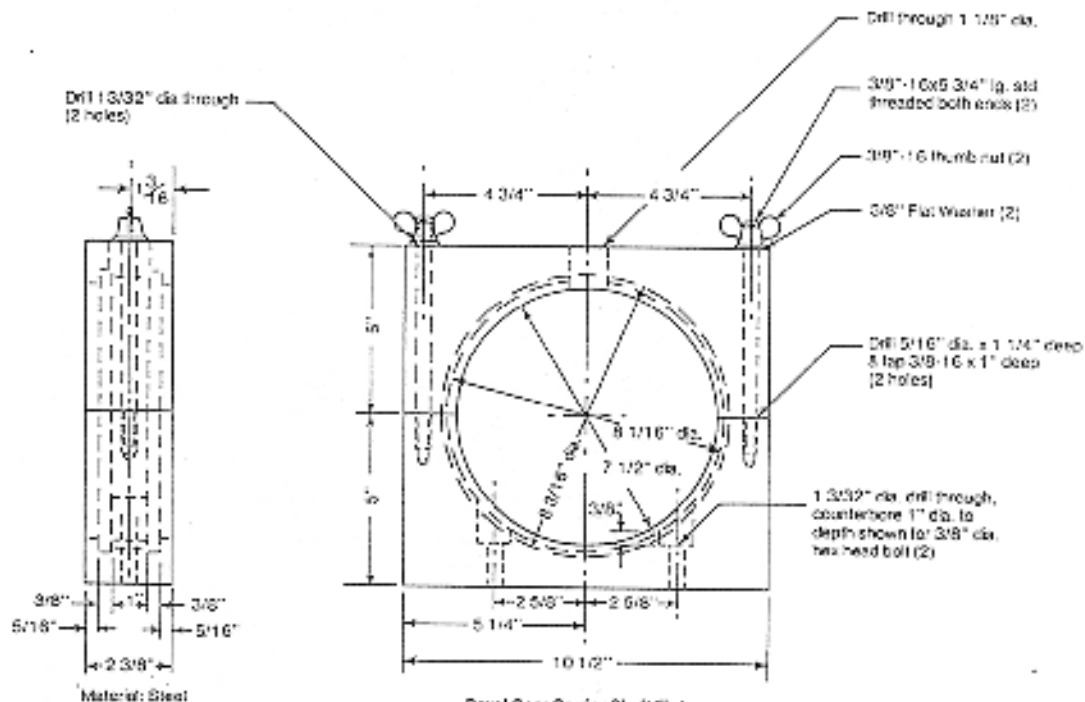
**Coupling Holder (10/92 models)**  
 Special Tool no. 1-50011-0100



Material: Steel

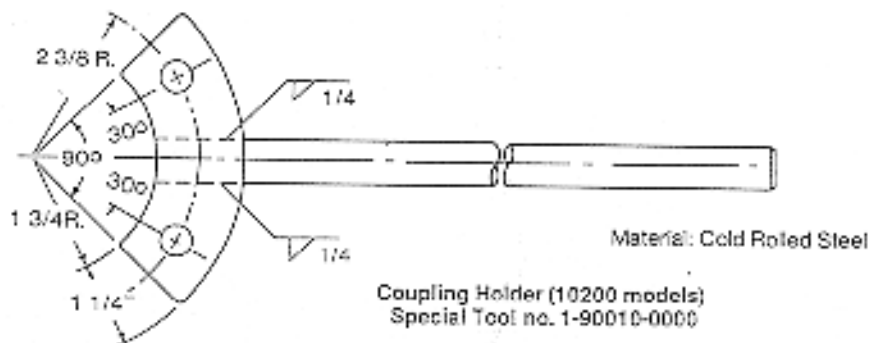
Finish All Over

Pinion Shaft Knockout Puller  
for 4 HE clutches  
Special Tool no. 1-90008-0000



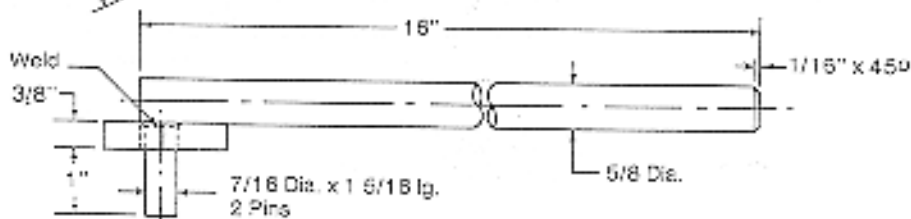
Material: Steel

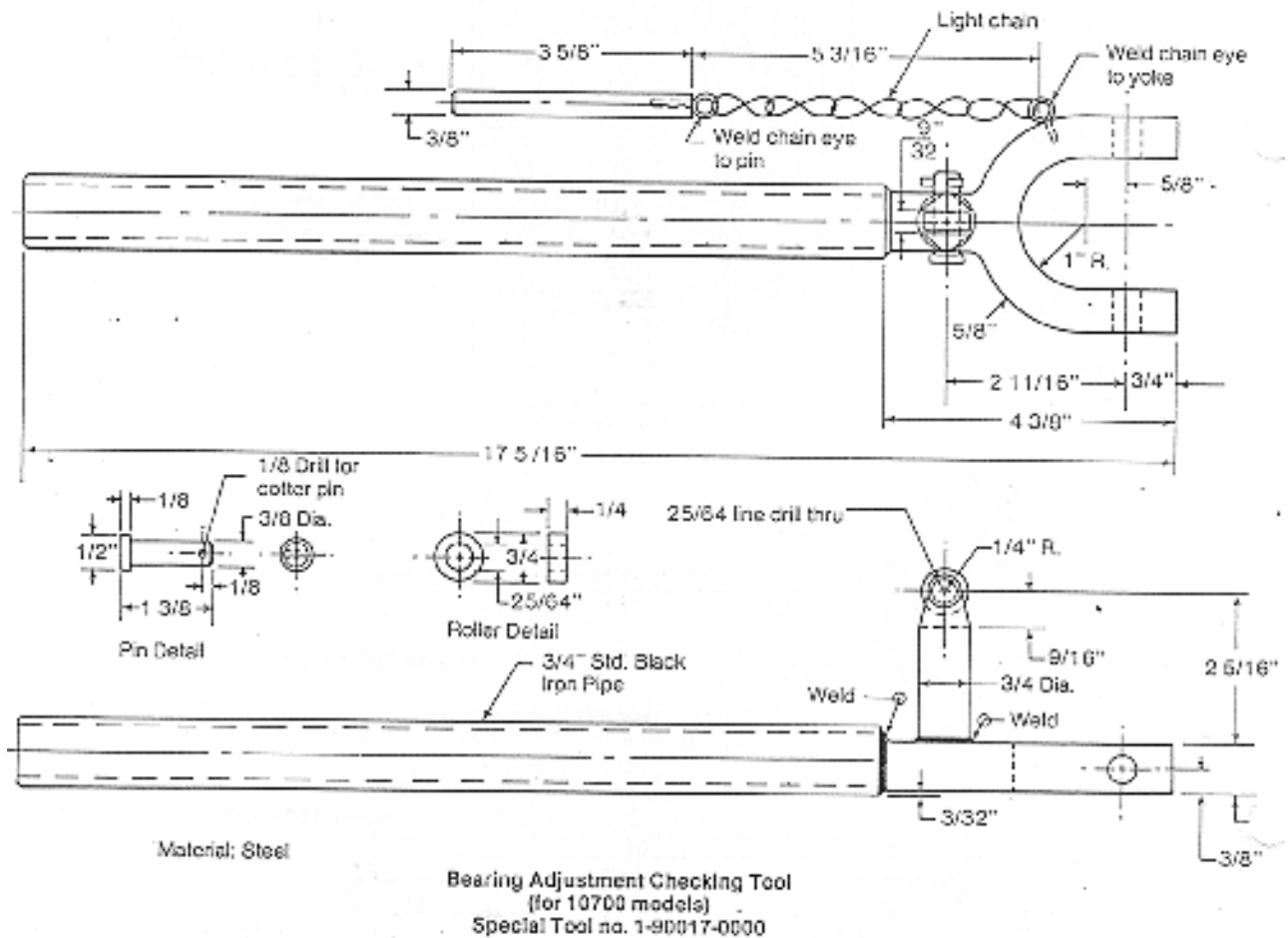
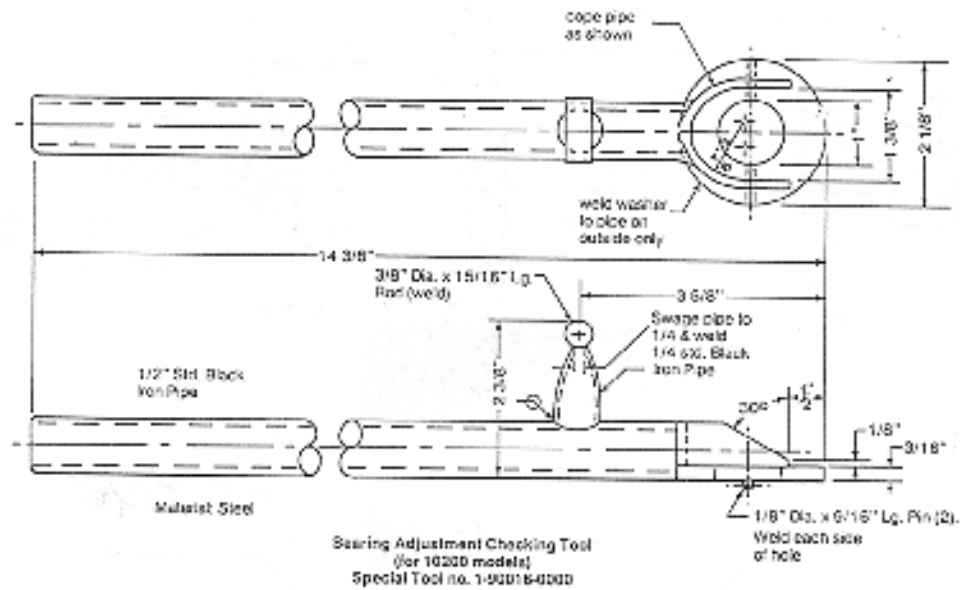
Bevel Gear Carrier Shaft Fixture  
Special Tool no. 1-90015-0000



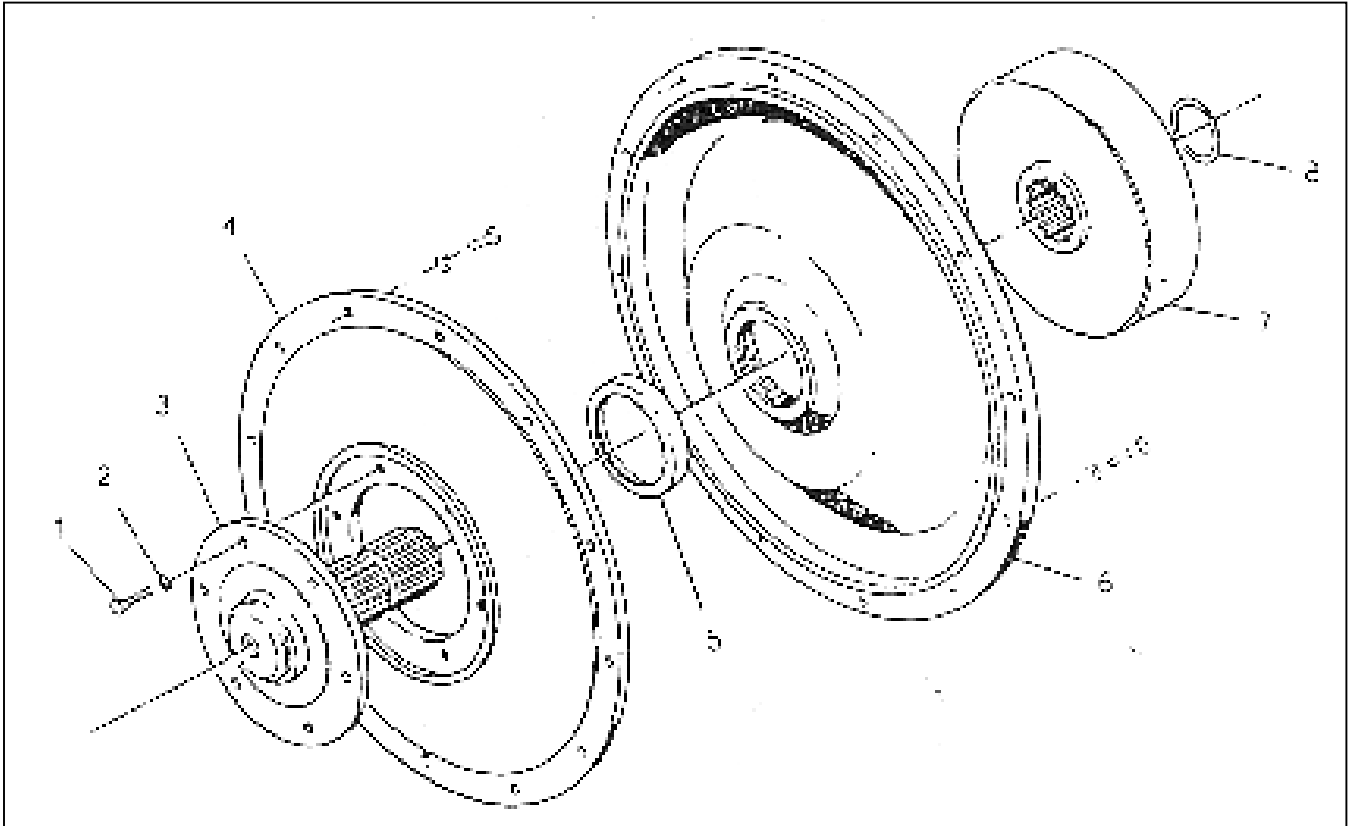
Material: Cold Rolled Steel

Coupling Holder (10200 models)  
Special Tool no. 1-90010-0000





**ADAPTATION AND DRIVE CONNECTIONS, HE 11200 & 11700**



ITEM	DESCRIPTION	PART NUMBER	QTY
1	CAPSCREW, HEX HD.;3/8-24X1" LG	1-07036-0800	6
2	LOCKWASHER, 3/8 LIGHT	1-09460-0800	14
3	ASSEMBLY, DRIVE FLANGE	see table of adaptations	1
4	ADAPTER, FLYWHEEL	see table of adaptations	1
5	OIL SEAL (IF PRESENT)	1-13713-0000	1
6	OIL DAM ADAPTER	see table of adaptations	1
7	FORWARD DRIVING DRUM	1-01116-3700	1
8	SNAP RING	1-01151-1500	1

**HE 11200 & 11700  
PUMP ASSEMBLY  
1 3/4" WIDE GEARS**

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	OIL PUMP ASSEMBLY, RIGHT HAND ENGINE ROTATION	1-13410-0500	1
REF.	OIL PUMP ASSEMBLY, LEFT HAND ENGINE ROTATION	1-13410-0600	1
1	PLUG, PIPE (STANDARD)	1-11279-0100	2
2	PLUG, PIPE .052 ORIFICE	1-13414-0000	1
3	*ADAPTER, PUMP	1-13411-0000	1
4	PLATE, ROTATION	1-11212-0000	1
5	SCREW, DRIVE #2X3/16" LG	1-13275-0000	2
6	PIN, SPRING 1/4"X3/4" LG	1-12097-1200	4
7	BODY, PUMP (13/4" WIDE)	1-13531-0000	1
8	BUSHING	1-11125-0000	4
9	GEAR, PUMP (1/3/4" WIDE)	1-13530-0000	2
10	DISC, FLAT 7/8" DIA X .074"	1-13731-0000	2
11	STOP, RELIEF	1-10285-0100	1
12	WASHER, COPPER	1-10288-0700	2
13	COVER, PUMP	1-10243-0300	1
14	LOCKWASHER, 1/4 I.D	1-05309-0800	6
15	CAPSCREW, HEX HEAD 1/4-20 X 2 1/2"	1-13543-0000	2
16	CAPSCREW, HEX HEAD 1/4-20 X 3 3/4"	1-13544-0000	4
17	PLUNGER, RELIEF	1-10258-0300	1
18	SPRING, PRESSURE RELIEF	1-13413-0000	1
19	INSERT, RELIEF VALVE	1-13412-0000	1
20	WASHER, COPPER	1-12902-0000	1
21	SCREW, PRESSURE RELIEF	1-06660-0800	1
22	NUT, DOME	1-06667-0800	1

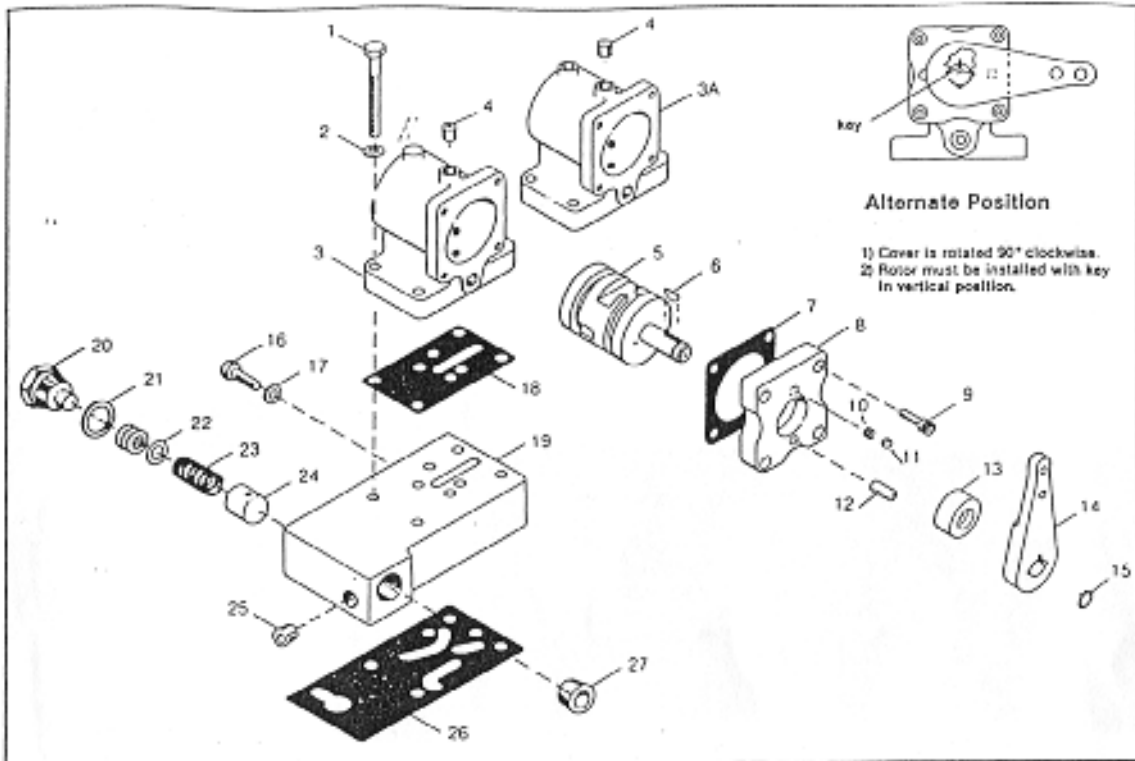
\*The following adapter assemblies may be ordered separately. They include items 1,2,3,4,5 and 8:

PUMP ADAPTER ASSEMBLY, RIGHT HAND	1-13411-0500
PUMP ADAPTER ASSEMBLY, LEFT HAND	1-13411-0600

**IMPORTANT PARTS REPLACE INFORMATION**

This pump is to be used with pump shaft part no. 1-12412-1400.

### 8.3 SELECTOR VALVE



NOTE: HE-10700 MODELS, 4.526 E.R. and 5.00 E.R., require SELECTOR VALVE 1-01175-1100.

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	ASSEMBLY, SELECTOR VALVE (FOR MOST RATIOS)	1-01175-1000	1
REF.	ASSEMBLY, SELECTOR VALVE (FOR HE-10700 4.526 E.R. and 5.00 E.R. ONLY)	1-01175-1100	1
1	CAPSCREW, HEX HEAD (1/4-20 X 21/4")	1-12377-0000	4
2	LOCKWASHER (1/4)	1-05309-0800	4
3	BLOCK, VALVE	1-01141-1600	1
3A	BLOCK, VALVE (FOR SELECTOR VALVE 1-01175-1100)	1-01141-2000	1
4	PIPE PLUG, HFX SOCKER (1/8 NPT)	1-11279-0200	1
5	VALVE, ROTARY	1-01144-1500	1
6	KEY	1-01164-3200	1
7	GASKET, VALVE COVER	1-01156-1500	1
8	COVER, VALVE	1-12417-1000	1
9	CAPSCREW, SOCKET HEAD (10-24 X 1/4" LG)	1-12844-0000	4
10	SPRING, INDEXING	1-01132-1500	1
11	BALL, INDEXING (1/4 DIA)	1-11200-0000	1
12	SPRING PIN (1/4 DIA. X 1/2 LG)	1-12097-0800	1
13	OIL SEAL	1-01155-1500	1
14	LEVER	1-12419-1000	1
15	RING, RETAINING	1-01180-1500	1
16	CAPSCREW, HEX HEAD	1-12145-0000	1
17	GASKET (5/16 INSIDE DIAMETER)	1-09471-0800	1
18	GASKET, BASEPLATE TO VALVE	1-01154-1500	1
19	BASEPLATE, VALVE	1-12821-1000	1
20	STOP, RELIEF	1-10285-0100	1
21	GASKET (COPPER)	1-10288-0700	1
22	WASHER, 030"	1-10741-0000	4
23	SPRING	1-07743-0800	1
24	PLUNGER	1-01177-1400	1
25	PIPE PLUG, HEX SOCKET (1/4 NPT)	1-11279-0300	1
26	GASKET, BASE PLATE TO HOUSING	1-12822-0000	1
27	PIPE PLUG, HEX SOCKET (3/8 NPT)	1-11279-0400	1



HE-11200 & HE 11700 STANDARD CLUTCH ASSEMBLY  
PART NO 1-00100-1409

ITEM	DESCRIPTION	PART NUMBER	QTY
REF.	CLUTCH ASSEMBLY	1-00100-1409	1
1	CAPSCREW, SOCKET HEAD	1-12732-0000	6
2	LOCKWASHER, HIGH COLLAR; 5/6" I.D	1-01104-1600	6
3	CLUTCH FLANGE, FORWARD	1-00212-3700	1
4	DISC. CLUTCH DRIVING	1-00230-2000	14
5	DISC, CLUTCH DRIVEN	1-00233-0700	11
6	NUT SELF-LOCKING	1-11105-0000	3
7	SHAFT, PINION	1-00214-1800	1
8	CAPSCREW, SOCKET HEAD	1-11104-0000	3
9	SUB-ASSEMBLY, BEARING	1-12434-0000	3
10	WASHER, THRUST	1-12369-0000	3
11	WASHER, PILOT	1-12366-0000	3
12	BEARING, NEEDLE	1-12368-0000	3
13	BEARING, NEEDLE	1-12367-0000	3
14	PINION, BEVEL	1-00217-1000	3
15	BEARING	1-12364-0000	2
16	GEAR, DRIVING	1-00215-1000	1
17	NUT, SELF-LOCKING; 1/4-28 NF	1-00226-3600	12
18	CYLINDER	1-00234-8400	2
19	QUAD RING	1-00238-1500	2
20	QUAD RING	1-00237-1500	2
21	* CARRIER, BEVEL GEAR	1-00219-1800	1
22	* SPRING PIN 1/8" DIA. X 3/4 " LG	1-12095-1200	2
23	*BUSHING, FORWARD COMMUTATOR	1-00247-1800	1
24	NAME PLATE	1-13430-0000	1
25	CAPSCREW, SOCKET HD; 1/4-28 X5/8" LG	1-13424-0000	12
26	GEAR, DRIVEN	1-00215-2000	1
27	CAPSCREW, SOCKET HD; 1/4-20X1 1/2"LG	1-07837-0800	12
28	RETAINER, RETURN SPRING	1-00243-3500	12
29	SPRING, RETURN	1-00239-1500	12
30	NUT, SELF-LOCKING; 1/4-20	1-07846-0800	12
31	CLUTCH FLANGE, REVERSE	1-00212-6100	1
32	ALLENUT, STANDARD: 5/16-24	1-12733-0000	6
33	DISC, CLUTCH DRIVEN (THICK)	1-00229-1700	3

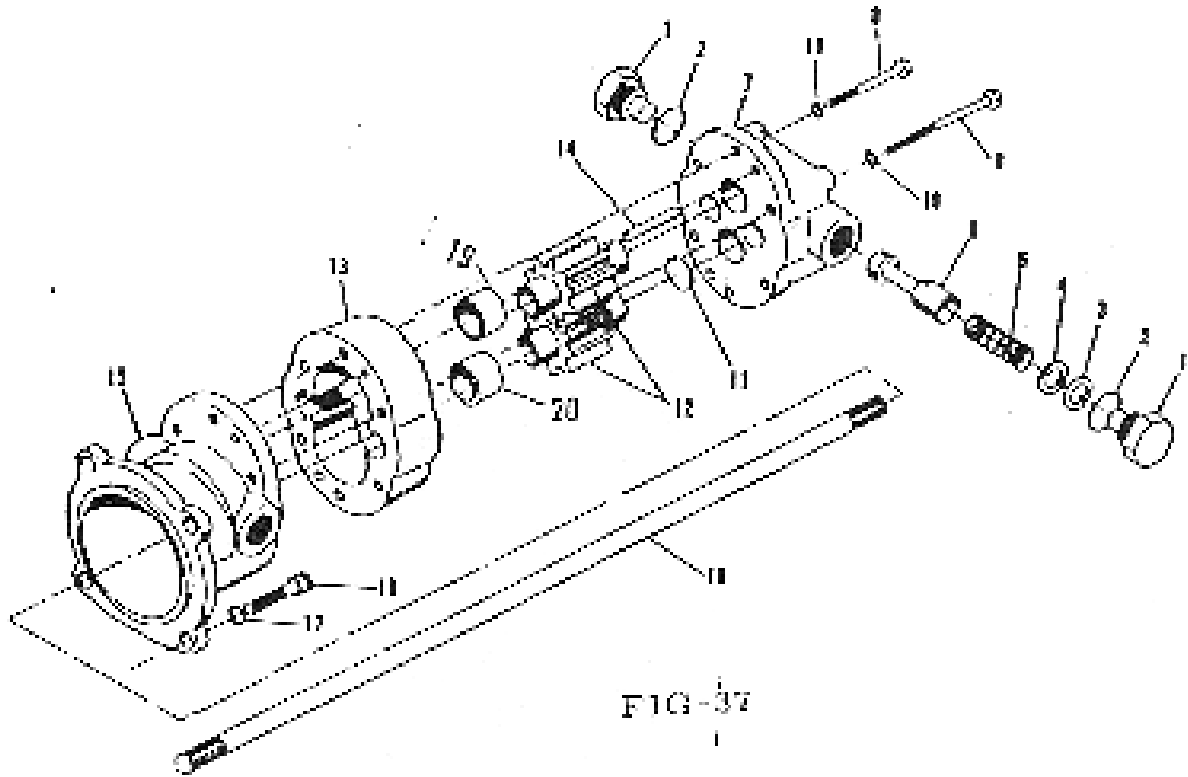
\*NOTE: items 21,22 and 23 are available as part number 1-00219-4400 GEAR CASE ASSEMBLY

**IMPORTANT PARTS REPLACEMENT INFORMATION**

19 tooth bevel pinions (No. 1-00217-1000) will run only with 27 tooth driving gear (1-00215-1000) and 27 tooth driven gear (1-00215-2000).

15 tooth bevel pinions (No.1-00217-1700) will run only with 21 tooth driving gear (No. 1-00215-0900) and 21 tooth driven gear (No. 1-00215-1800).

## 2HE PUMP ASSEMBLY



INDEX NO.	PART NUMBER	DESCRIPTION	QTY.
1	1-10285-0100	RELIEF VALVE STOP	2
2	1-10288-0700	COPPER WASHER	2
3	1-10720-0000	PLAIN WASHER .015"	
4	1-10741-0000	PLAIN WASHER .030"	
5	1-07743-0800	SPRING	1
6	1-10258-0300	RELEIF VALVE PLUNGER	1
7	1-10243-0300	PUMP COVER	1
8	1-12377-0000	HEX HEAD CAP SCREW	2
9	1-12376-0000	HEX HEAD CAP SCREW	4
10	1-10251-0000	LOCK WASHER	6
11	1-11379-0000	WELCH PLUG	1
12	1-10254-0200	PUMP GEAR	2
13	1-10242-0000	PUMP BODY	1
14	1-10206-0000	DOWEL	4
15	1-10241-0100	PUMP ADAPTER	1
16	1-10248-0000	SOCKET HEAD CAP SCREW	4
17	1-09458-0800	LOCK WASHER	4
18	1-10259-0000	PUMP DRIVE SHAFT	1
19	1-11125-0000	BUSHING	3
20	1-11380-0000	BUSHING	1
21	1-09227-0000	PIPE PLUG	1

INDEX NO.	2HE 100A STANDARD	2HE 100C HEAVY DUTY	DESCRIPTION	QTY
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1	1-00210-1500	1-00212-1500	FORWARD FLANGE	1
2	1-00210-1500	1-00212-1500	REVERSE FLANGE *	1
3	1-00221-1600	1-00221-1600	SOCKET HEAD CAPSCREW	12
4	1-01104-1600	1-01104-1600	LOCKWASHER	12
5	1-00230-2000	1-00230-2000	DRIVE DISC (QTY. 10 IN C)	8
6	1-00233-0700	1-00233-0700	DRIVE DISC (QTY. 10 IN C)	8
7	1-00215-0700	1-00215-0800	DRIVER GEAR FWD.	1
8	1-00215-1500	1-00215-1600	DRIVEN GEAR REV.	1
9	N/A 1-00211-1500	1-00213-1500 N/A	BALL BEARING BUSHING	2 2
10	1-00234-8400	1-00234-8400	CYLINDER	2
11	1-13424-0000	1-13424-0000	SOCKET HEAD CAP SCEW	12
12	100226-3600	1-00226-3600	ALLOY LOCK NUT	12
13	1-00237-1500	1-00237-1500	QUAD RING	2
14	1-00238-1500	1-00238-1500	QUAD RING	2
15	1-00247-“+”	1-00247-“+”	FORWARD COMM. BUSHING	1
16	1-10288-0000	1-10288-0000	LOCK PIN	2
17	1-00239-1500	1-00239-1500	RETURN SPRING	12
18	1-07837-0800	1-07837-0800	SOCKET HEAD CAP SCREW	12
19	1-07846-0800	1-07846-0800	ALLOY LOCK NUT	12
20	1-00243-8900	1-00243-8900	RETURN SPRING RETAINER	12
21	1-00214-1500	1-00214-1500	PINION SHAFT	3
22	1-11104-0000	1-11104-0000	SOCKET HEAD CAP SCREW	3
23	1-11105-0000	1-11105-0000	ALLOY LOCK NUT	3
24	1-00217-4100	1-00217-4100	BEVEL PINION & BUSHING	3
25	1-00218-1500	1-00218-1500	PINION BUSHING	3
26	1-00220-1500	1-00220-1500	THRUST WASHER	3
27	1-00219-1600	1-00219-1600	CARRIER	1

\* INCLUDES 3 ROLL PINS FOR REVERSE FLANGE  
“+” 2 SIZES AVAILABLE DEPENDING ON CARRIER USED, MEASURE MAIN BODY OUTSIDE DIAMETER  
SIZE-1500 HAS 1.690” O.D., SIZE –1800 HAS 1.562” O.D. ALL OTHER DIMENSIONS ARE THE SAME

INDEX NO.	10200	10200 W/IDLER	10700	10700 W/ IDLER	DESCRIPTION	QTY.
1	1-07789-0000	1-06757-0000	1-06757-0000	1-06757-0000	PLUG	1
2	1-00100-100 A/C	1-00100-100 A/C	1-00100-100 A/C	1-00100-100 A/C	CLUTCH ASSEMBLY	1
3	1-01151-1500	1-01151-1500	1-01151-1500	1-01151-1500	RING	1
4	1-01116-0000	1-0116-0000	1-01116-0000	1-01116-0000	DRIVING DRUM	1
5,6,7,8	SEE	ADAPTER	TABLE			1
9	1-10720-0000	1-10720-0000	1-10720-0000	1-10720-0000	KEY	1
10	1-07787-0000	1-07787-0000	1-07787-0000	1-07787-0000	PLUG	1
11	1-10277-0000	1-10277-0000	1-10277-0000	1-10277-0000	OIL DAM GASKET	8
12	1-06751-0800	1-06751-0800	1-06751-0800	1-06751-0800	BOLT	8
13	1-09460-0800	1-09460-0800	1-09460-0800	1-09460-0800	WASHER	1
14	1-00250-1600	1-00250-1600	1-00250-1600	1-00250-1600	REVERSE DRUM	8
15	1-07546-0800	1-07546-0800	1-07546-0800	1-07546-0800	BOLT	8
16	1-09247-0000	1-09247-0000	1-09247-0000	1-09247-0000	WASHER	1
17	1-01124-1200	1-01124-1200	1-01124-1200	1-01124-1200	BREATHER	1
18	1-10213-0100	1-10213-0100	1-10734-0100	1-10734-0100	DIP STICK	1
19	1-10274-0000	1-10274-0000	1-10274-0000	1-10274-0000	INVERTED FLARE NUT	1
20	1-10219-0700	1-10219-0700	1-10219-0700	1-10219-0700	HOSE	1
21	1-10218-0000	1-10218-0000	1-10218-0000	1-10218-0000	HOSE	1
22	1-10217-0100	1-10217-0100	1-10217-0100	1-10217-0100	HOSE	1
23	1-01175-2000	1-01175-2000	1-01175-2000	1-01175-2000	VALVE	1
24	1-01150-0000	1-01150-0000	1-01150-0000	1-01150-0000	VALVE BASE	1
25	1-01169-1500	1-01169-1500	1-01169-1500	1-01169-1500	GASKET	1
26(1)	1-10298-0000	1-10298-0000	1-10298-0000	1-10298-0000	OIL COOLER ASSEMBLY	1
26A	1-10754-0000	1-10754-0000	1-10754-0000	1-10754-0000	ANODE	2
27	1-10297-0000	1-10297-0000	1-10297-0000	1-10297-0000	BRACKET	2
28	1-00290-0000	1-00290-0000	1-00290-0000	1-00290-0000	BOLT	2
29	1-05261-0000	1-05261-0000	1-05261-0000	1-05261-0000	NUT	2
30	1-05262-0000	1-05262-0000	1-05262-0000	1-05262-0000	WASHER	2
31	1-10075-0000	1-10075-0000	1-10075-0000	1-10075-0000	BOLT	2
32	1-09455-0000	1-09455-0000	1-09455-0000	1-09455-0000	WASHER	2
33	1-10240-0200	1-10240-0200	1-10240-0200	1-10240-0200	PUMP	1
34	1-10214-0000	1-10214-0000	1-10214-0000	1-10214-0000	GASKET	1
35	1-10204-0000	1-10204-0000	1-10204-0000	1-10204-0000	COVER	1
36	1-10279-0000	1-10279-0000	1-10279-0000	1-10279-0000	GASKET	1
37	1-11101-0000	1-11101-0000	1-11101-0000	1-11101-0000	BOLT	4
38	1-01103-1500	1-01103-1500	1-01103-1500	1-01103-1500	COVER	4

NOTE 1: INCLUDES ITEMS 26A THROUGH 30

INDEX NO.	10200	10200 W/IDLER	10700	10700 W/IDLER	DESCRIPTION	QTY
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39	1-01131-1500	1-01131-1500			GASKET	
40	1-08087-0000	1-08087-0000			BOLT	
41	1-10207-0000	1-10207-0000	N/A	N/A	COUPLING SAE 2 SPIGOT RING	
	1-06730-0000	1-06730-0000	N/A	N/A		
41	1-1299-0000	1-10299-0000	N/A	N/A	COUPLING SAE 3 SPIGOT RING	
	1-10222-0000	1-10222-0000	N/A	N/A		
42	N/A	N/A	1-06722-0000	1-06722-0000	COUPLING	1
43	1-10230-0000	1-10230-0000	1-06746-0800	1-06746-0800	COTTER PIN	1
44	1-10231-0000	1-10231-0000	1-06744-0800	1-06744-0800	NUT	1
45	1-10226-0000	1-10226-0000	1-06745-0800	1-06745-0800	WASHER	1
46	1-10235-0000	1-10235-0000	N/A	N/A	KEY	1
47	1-12974-0000	1-12974-0000	1-12976-0000	1-12976-0000	OIL SEAL	1
48	1-10205-0000	1-10205-0000	1-06718-1200	1-06718-1200	CAP	1
49	1-09435-0000	1-09435-0000	1-06753-0000	1-06753-0000	BOLT	6
50	1-09458-0800	1-09458-0800	1-06985-0000	1-06985-0000	WASHER	6
51	1-12409-2600	1-12409-2600	1-03755-3400	1-03755-3400	SHIM SET	1
52	1-10211-0000	1-10211-0000	1-10726-0000	1-10726-0000	COVER	1
53	1-11101-0000	1-11101-0000	1-11101-0000	1-11101-0000	BOLT	4
54	1-09455-0000	1-09455-0000	1-09455-0000	1-09455-0000	WASHER	4
55	1-10262-0000	1-10262-0000	1-10262-0000	1-10262-0000	BEARING	1
56	1-09316-0800	1-09316-0800	1-09316-0800	1-09316-0800	NUT	1
57	1-09317-0800	1-09317-0800	1-09317-0800	1-09317-0800	WASHER	1
58	1-1023-0000	N/A	N/A	N/A	COVER 1:1 RATIO	1
	1-10223-0000	1-10223-0000	N/A	N/A	COVER 1.5 RATIO	1
	1-10203-0000	1-10203-0000	N/A	N/A	COVER 2:1 RATIO	1
	1-10203-0000	N/A	1-10703-0000	1-10725-0000	COVER 2.5:1 RATIO	1
	N/A	N/A	1-10703-0000	1-10723-0000	COVER 3:1 RATIO	1
	N/A	N/A	1-10703-0000	1-10733-0000	COVER 3.5:1 RATIO	1
	N/A	N/A	1-10703-0000	1-10743-0000	COVER 4:1 RATIO	1
59	1-10045-0000	1-10045-0000	1-06751-0800	1-06751-0800	BOLT	14
60	1-09247-0000	1-09247-0000	1-10046-0000	1-10046-0000	WASHER	14
61	1-10278-1000	1-10278-1000	1-10735-1000	1-10735-1000	GASKET	1
62	N/A	1-10267-0100	N/A	1-10267-0100	IDLER GEAR	1

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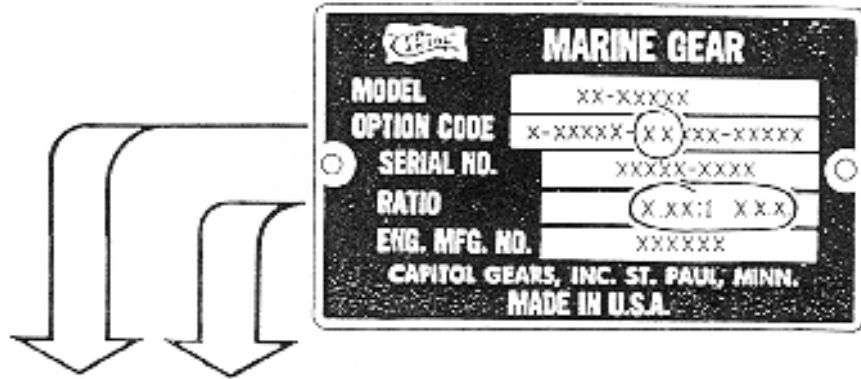
63	N/A	1-10281-0000	N/A	1-10281-0000	BEARING	2
64	1-10293-0000	N/A	N/A	N/A	PINION SHAFT 1:1	1
	1-10264-2600	1-10266-2600	N/A	N/A	PINION SHAFT 1.5:1	1
	1-10210-2600	1-10268-2600	N/A	N/A	PINION SHAFT 2:1	1
	1-10295-2600	N/A	1-10738-2600	1-10736-2600	PINION SHAFT 2.5:1	1
	N/A	N/A	1-10706-2600	1-10266-2600	PINION SHAFT 3:1	1
	N/A	N/A	1-10708-2600	1-10210-2600	PINION SHAFT 3.5:1	1
	N/A	N/A	1-10268-2600	1-10295-2600	PINION SHAFT 4:1	1
65	1-10294-0000	N/A	N/A	N/A	GEAR 1:1	1
	1-10265-0300	1-10269-0300	N/A	N/A	GEAR 1.5:1	1
	1-10209-0300	1-10270-0300	N/A	N/A	GEAR 2:1	1
	1-10296-0300	N/A	N/A	N/A	GEAR 2.5:1	1
66	N/A	N/A	1-10739-0300	1-10737-0300	GEAR 2.5:1	1
	N/A	N/A	1-10707-0300	1-10713-0300	GEAR 3:1	1
	N/A	N/A	1-10709-0300	1-10715-0300	GEAR 3.5:1	1
	N/A	N/A	1-10711-0300	1-10717-0300	GEAR 4:1	1
67	1-10233-0000	1-10233-0000	1-06726-0800	1-06726-0800	BEARING	1
68	1-10234-0000	1-10234-0000	1-06725-0800	1-06725-0800	BEARING	1
69	1-10290-0100	1-10290-0100	1-10290-0100	1-10290-0100	TUBE	1
70	1-10289-0000	1-10289-0000	1-10289-0000	1-10289-0000	SCREEN	1
71	1-10261-0000	1-10261-0000	1-10261-0000	1-10261-0000	BEARING	1
72	1-10263-0000	1-10263-0000	1-10263-0000	1-10263-0000	RING	1
73	1-10945-0000	1-10945-0000	1-10945-0000	1-10945-0000	RING	1
74	1-00248-2100	1-00248-2100	1-00248-2100	1-00248-2100	COMM. BUSHING	1
75	1-10947-0000	1-10947-0000	1-10947-0000	1-10947-0000	LOCK PIN	1
76	1-10267-0000	1-10267-0000	1-07429-0000	1-07429-0000	DOWEL	1
77	1-10202-0000	N/A	N/A	N/A	HOUSING 1:1	1
	1-10202-0000	1-10220-0000	N/A	N/A	HOUSING 1.5:1	1
	1-10202-0000	1-10202-0000	N/A	N/A	HOUSING 2:1	1
	1-10202-000	N/A	1-10702-0000	1-10724-0000	HOUSING 2.5:1	1
	N/A	N/A	1-10702-0000	1-10722-0000	HOUSING 3:1	1
	N/A	N/A	1-10702-0000	1-10732-0000	HOUSING 3.5:1	1
	N/A	N/A	1-10702-0000	1-10442-0000	HOUSING 4:1	1

<b>PUMP SHAFT REPLACEMENTS</b>		<b>PART # AND LENGTH</b>
HE-11200	ALL	1-12412-1400
HE-10200	S/N 14000-XXXX AND UP	
HE-11700	21/2:1 THRU 4:1 RATIO	20.969"
HE-10700	21/2:1 THRU 4:1 RATIO AND WITH S/N 11000-XXXX AND UP	
WITH LONG OIL PUMPS 1-13410-0500 & 1-13410-0600		
HE-10200	S/N 13999-XXXX AND LOWER	1-12412-0000
HE-10700	21/2:1 THRU 4:1 RATIO AND WITH S/N 10999-XXXX AND LOWER	20.719"
WITH OIL PUMPS 1-13410-0100 & 1-13410-0200		
HE-11700	41/2:1 AND 5:1 RATIO	1-13932-1000
HE-10700	41/2:1 AND 5:1 RATIO AND WITH S/N 11000-XXXX AND UP	21.969"
WITH LONG OIL PUMP 1-13410-0500 & 1-13410-0600		
HE-10700	41/2:1 AND 5:1 RATIO AND WITH S/N 10999-XXXX AND LOWER	1-13932-0000
WITH OIL PUMP 1-13410-0100		21.719"

<b>FORWARD DRIVING DRUM REPLACEMENTS</b>	<b>PART #</b>
HE 11200 AND HE 11700	1-01116-3700
HE 10200 AND HE 10700	1-01116-1800

## 8.7 PINION AND OUTPUT GEAR SELECTION CHART

- LOCATE THE NAMEPLATE (ON BACK OF HOUSING) AND DETERMINE THE TWO REDUCTION RATIO OPTIONS CODE NUMBERS (CIRCLED IN SAMPLE BELOW) AND THE RATIO. THE NUMBER OF TEETH MAY BE CHECKED ALSO
- MATCH THIS INFORMATION WITH THE CHART BELOW TO DETERMINE THE CORRECT PART NUMBER (S).



HE-10200  
& HE-11200

OPTION CODE	RATIO	PART NAME	NUMBER OF TEETH	PART NUMBER
01	1.50 A.E.R.	PINION AND SHAFT OUTPUT GEAR	22 33	1-12427-2600 1-12429-0000
02	2.00 A.E.R.	PINION AND SHAFT OUTPUT GEAR	18 36	1-13156-0100 1-13155-0000
03	2.44 A.E.R.	PINION AND SHAFT OUTPUT GEAR	16 50	1-12333-2600 1-12336-0000
04	2.90 A.E.R.	PINION AND SHAFT OUTPUT GEAR	14 41	1-12903-2600 1-12964-0000
05	1.50 E.R.	PINION AND SHAFT OUTPUT GEAR	20 30	1-12334-2600 1-12337-0000
06	2.00 F.R.	PINION AND SHAFT OUTPUT GEAR	17 34	1-12335-2600 1-12338-0000
07	1.007 A.E.R.	PINION AND SHAFT OUTPUT GEAR	27 28	1-12372-2600 1-12373-0000
08	1.053 E.R.	PINION AND SHAFT OUTPUT GEAR	24 26	1-12346-2600 1-12442-0000
09	1.75 A.E.R.	PINION AND SHAFT OUTPUT GEAR	20 35	1-12334-2600 1-12455-0000
10	1.20 A.C.R.	PINION AND SHAFT OUTPUT GEAR	25 30	1-12361-2600 1-12362-0000

HE-10700  
& HE-11700

OPTION CODE	RATIO	PART NAME	NUMBER OF TEETH	PART NUMBER
01	2.541 A.E.R.	PINION AND SHAFT OUTPUT GEAR	24 61	1-12346-2600 1-13739-0000
02	3.047 A.E.R.	PINION AND SHAFT OUTPUT GEAR	21 64	1-12347-2600 1-13707-0000
03	3.473 A.E.R.	PINION AND SHAFT OUTPUT GEAR	19 66	1-12340-2600 1-13709-0000
04	4.00 A.E.R.	PINION AND SHAFT OUTPUT GEAR	17 68	1-12335-2600 1-10711-0000
05	2.478 E.R.	PINION AND SHAFT OUTPUT GEAR	23 57	1-12345-2600 1-13737-0000
06	3.00 E.R.	PINION AND SHAFT OUTPUT GEAR	20 60	1-12334-2600 1-10712-0000
07	3.444 E.R.	PINION AND SHAFT OUTPUT GEAR	18 62	1-12426-2600 1-10716-0000
08	4.00 F.R.	PINION AND SHAFT OUTPUT GEAR	16 64	1-12333-2600 1-10717-0000
09	4.633 A.E.R.	PINION AND SHAFT OUTPUT GEAR	15 68	1-13923-0000 1-13924-0000
10	4.526 E.R.	PINION AND SHAFT OUTPUT GEAR	15 66	1-13947-0000 1-13948-0000
11	5.00 A.E.R.	PINION AND SHAFT OUTPUT GEAR	14 20	1-13921-0000 1-13925-0000
12	5.00 E.R.	PINION AND SHAFT OUTPUT GEAR	18 90	1-13927-0000 1-13928-0000