

C-192-1 C-192-2 T DRIVE, VACUUM & HYDRAULIC PUMP

1	C-193	C-193 HOUSING, T DRIVE
8	A-148-1	A-148-1 STUDS
1	A-143	A-143 SHAFT, VACUUM PUMP
3	B-650B	B-650B BEARINGS
1	A-169-1	A-169-1 SPACER
1	A-152-L	A-152-L GEAR, VACUUM PUMP
2	B-36	B-36 TORRINGTON NEEDLE PINS, GEAR STAKING
2	*5000-150	*5000-150 TRUARC SNAP RINGS
1	A-139	A-139 SHAFT, HYDRAULIC PUMP
2	A-169-4 to -6	A-169-4 to -6 SPACERS (AS NEEDED)
1	A-152-R	A-152-R GEAR, HYDRAULIC PUMP
1	*60151 or *48640	*60151 or *48640 VICTOR SEAL
1	OR 7849CR	OR 7849CR CHICAGO RAWHIDE SEAL
1	OR *48640	OR *48640 VICTOR OIL SEAL
1	OR 7849CR CHICAGO	OR 7849CR CHICAGO RAWHIDE SEAL
1	SAME	*530371 or B-247 SPACER
2	A-148-2	A-148-2 STUDS T DRIVE MTG.
3	AN4045-1	AN4045-1 GASKET T DRIVE MTG.

THIS PAD IS APPROVED FOR THE FOLLOWING OR ALTERNATE HAVING EQUAL OR LESS LOADING.
 WEIGHT 2.4 LBS.
 OVERHANG MOMENT 7 LB. IN.
 TORQUE 17.5 IN. LBS.

NOTE: AFTER INSTALLATION OF A-143 SHAFT, PRESS (1) B-650B BEARING AGAINST SHOULDER OF A-139 SHAFT; PRESS ON A-152- (SEE CHART) SPIRAL GEAR, HYDRAULIC PUMP; INSTALL IN HOUSING TO CHECK END PLAY; ADD A-169-4 TO -6 SPACERS BETWEEN BEARING & GEAR TO LIMIT END PLAY .005 TO .010"; *31 DRILL & REAM .125 DIA. HOLE THRU GEAR & SHAFT AND STAKE TOGETHER WITH B-36 TORRINGTON NEEDLE PIN; INSTALL IN HOUSING & LOCK IN PLACE WITH *5000-150 TRUARC SNAP RING; INSTALL *60151 OR *48640 VICTOR SEAL OR 7849CR CHICAGO RAWHIDE SEAL

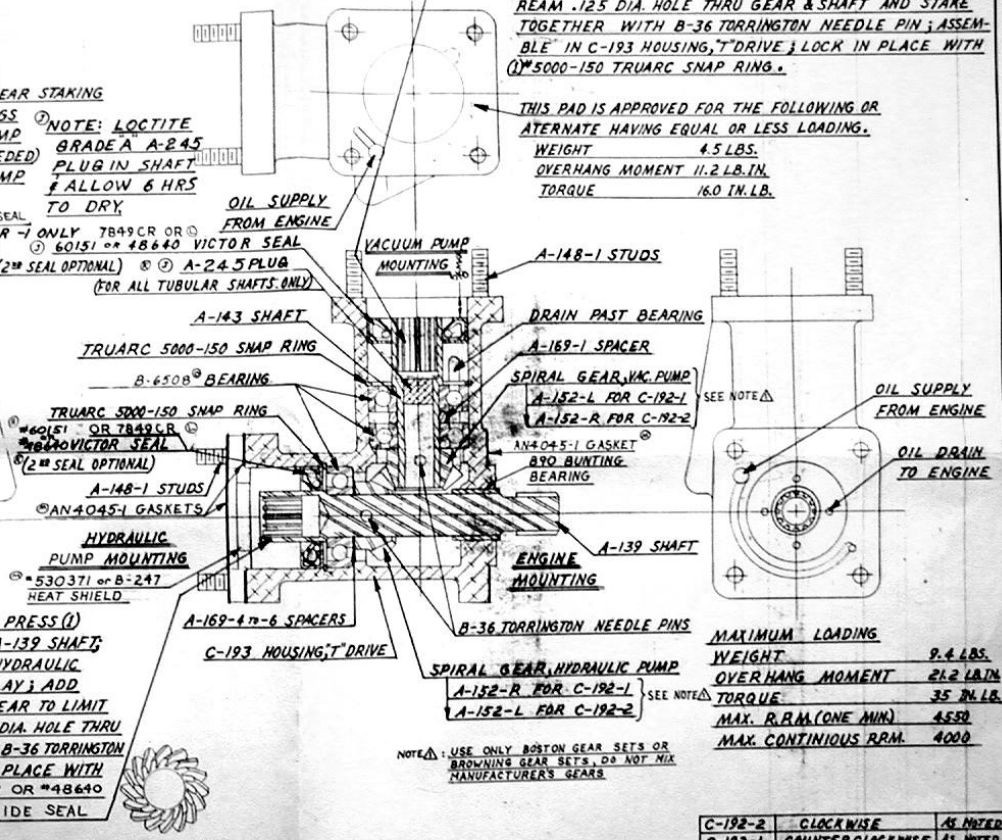
NOTE: LOCTITE GRADE A A-245 PLUG IN SHAFT ALLOW 6 HRS TO DRY

FOR -1 ONLY 7849CR OR *60151 or *48640 VICTOR SEAL (2# SEAL OPTIONAL) & A-245 PLUG (FOR ALL TUBULAR SHAFTS ONLY)

*530371 or B-247 HEAT SHIELD

NOTE: PRESS (1) B-650B BEARING ON A-143 SHAFT TO SHOULDER SLIP ON A-169-1 SPACER; PRESS (1) B-650B BEARING AGAINST SPACER; PRESS ON A-152- (SEE CHART) SPIRAL GEAR, VACUUM PUMP UNTIL NO PLAY EXISTS BETWEEN PARTS; *31 DRILL & REAM .125 DIA. HOLE THRU GEAR & SHAFT AND STAKE TOGETHER WITH B-36 TORRINGTON NEEDLE PIN; ASSEMBLE IN C-193 HOUSING, T DRIVE; LOCK IN PLACE WITH (1) *5000-150 TRUARC SNAP RING.

THIS PAD IS APPROVED FOR THE FOLLOWING OR ALTERNATE HAVING EQUAL OR LESS LOADING.
 WEIGHT 4.5 LBS.
 OVERHANG MOMENT 11.2 LB. IN.
 TORQUE 16.0 IN. LB.



N	NOTE Δ ADDED	10-9-81	C.H.S.
M	REWORKS (GASKETS, *530371 or B-247 SPACER, A-148-2 STUDS ADDED)	1-12-71	
L	7849CR SEAL ADDED	10-16-72	
K	NOTES ADDED	1-11-66	
J	A-245 *60151 or *48640 SEAL ADDED	V.H.G.	
H	*48640 ADDED	4-16-66	
G	NOTES & PARTS LIST ADDED	4-16-66	AVZ
F	REWORKS (A-152-R, A-152-L, A-169-4 TO -6 SPACERS) REWORK	5-20-66	AVZ
E			
D			
C			
B			
A			

A-152-R SPIRAL GEAR

C-192-2	CLOCKWISE	AS NOTED
C-192-1	COUNTERCLOCKWISE	AS NOTED
MODEL	ROTATION	TYPE
5-87-59	2-24-63	2-24-63
REPLACES	C-192	
REPLACES	SCALE FULL	C-192

DO NOT SCALE DWG. REPORT ANY CHANGES

SEE PARTS DRAWINGS

MATERIAL HEAT TREAT FINISH WEIGHT 2.5#

HARTZELL PROPELLER CO. Piquette, Ohio

T DRIVE ASSEMBLY FOR VACUUM & HYDRAULIC PUMP

REPLACES C-192

SCALE FULL

C-192

C-192