ROLLER TUBE FINISHERS

RTF HPU

SAFETY, OPERATION & PARTS MANUAL

RTF HPU Part #: 051735
Manual Part #: 038166 | Revision: -
Language: English | Original Instructions

TABLE OF CONTENTS

1A OPERATIONS

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SAFETY PRECAUTIONS

* Read operating and safety instructions before using the Roller Screed and operate the machine in accordance with the manufacturers instructions.

* Inspect your Roller Screed for damage or tampering that can sometimes occur during shipping. If damage is found, **file a claim with your carrier immediately**. Mark freight bill of lading as damaged shipment.

* Do not operate your Roller Screed if any guards have been removed.

* Only trained personnel should be allowed to operate your Roller Screed.

* No foreign objects such as buckets, tools, or materials should ever be attached to or allowed to ride on the handle or the power unit during operation.

* Do not attempt to fill tank or oil sump while engine is running. Allow engine to cool for 5 minutes before refueling.

* Do not use over-the-counter hardware to replace manufacturers hardware.

* HEALTH HAZARD: When operating machines with gasoline powered engines in confined areas, the fumes *MUST* be ventilated. If they are not ventilated, serious injury or death may occur.

* Always wear safety goggles and gloves when operating the Roller Screed.

1A OPERATIONS

DESCRIPTION

The Allen Engineering Hydraulic Roller Tube Screed is available with two different engines. The engines that are available with these two are an 11 HP Kawasaki and an 11 HP Honda both having the electric start option. The hydraulic system is rated at 6 gallons per minute at 2500 PSI. The cart-like framework is constructed of high strength steel for added durability and service life. Both models allow you to cut surface grade as quickly as the concrete can be unloaded. The Roller Screed has many useful applications such as, sidewalks, driveways, slab-on-grade pours, high rise pours, slope pours and numerous other applications. The Roller Screed is exceptionally easy to handle and maneuver. The framework has an easily removable protective frame for maintenance. Also there is a 12 volt fan cooler to keep hydraulic fluids cool. The hydraulic drive unit is available with either a Brand© or a Webster© control valve. The roller tubes are 6" in diameter with a .109" wall. Lengths that are available range from 6 feet to 26 feet. Weight for the tubes is approximately 7 lbs. per linear foot. Also the hoses are quick disconnect with a 50 foot length being standard.

ORDERING PARTS

This manual contains an illustrated parts list for help in ordering replacement parts for your machine. Follow the instructions listed below when ordering parts to ensure prompt and accurate delivery. All orders for parts must be made through your local authorized Allen Engineering dealer. All authorized Allen Engineering dealers must fax a copy of the parts order to customer service. The fax number is (870) 236-3934. Facsimile orders must contain the following information:

1. On all orders for service parts include SERIAL NUMBER and MODEL NUMBER. Shipment may be delayed if this information is not included.

2. Include correct description and part number from part section 2A.

3. **State exact shipping instructions including preferred routing and complete destination address. Also please indicate your preferred freight carrier. If no freight carrier is indicated Allen Engineering reserves the right to ship the materials the best possible way. Once a shipment leaves Allen Engineering's docks it becomes the responsibili ty of the freight carrier to insure that it arrives at its intended destination.**

4. **DO NOT** return parts to Allen Engineering without receiving written authorized Customer Service Report(CSR) from Allen Engineering. All authorized returns must be shipped pre-paid. **All unauthorized returns will be shipped back to the addressee at their expense.**

Keep this manual or a copy of it with the machine. If you lose this manual or need an additional copy please contact your Allen distributor or Allen Engineering Corporation at (800) 643-0095 and order literature part number 038166.

	DAILY	EVERY 20 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 250 HOURS
CHECK ENGINE FUEL	X				
HYDRAULIC FLUID	X				
LOOSE CONNECTIONS	X				
INSPECT AIR FILTERS REPLACE AS NEEDED	X				
CHECK AND TIGHTEN EXTERNAL HARDWARE	X				
CHECK HYD. FITTINGS	X				
CHANGE OIL FILTER			X (FIRST)		X
CHECK VALVE CLEARANCE			X		
CHANGE ENGINE OIL				X	
REPLACE OIL FILTER (ENGINE)				X	
REPLACE SPARK PLUG					X

1998 - 1999 LIMITED WARRANTY

Allen Engineering Corporation warrants its products to be free of defects in material or workmanship for the following periods:

A. All New Machines and Part	**6 Months**
B. All New Gear Boxes	**2 Years**
C. All Factory Reconditioned Gear Boxes	**1 Year**

Warranty period begins on first day of use by End User. This first day of use is established by a completed warranty card or a Bill of Sale to the end user. All warranty is based on the following limited warranty terms and conditions.

1. Allen Engineering Corporation's obligation and liability under this warranty is limited to repairing or replacing parts if, after Allen's inspection, it is determined to be a defect in material or workmanship. Allen Engineering Corporation reserves the choice to repair or replace.
2. If Allen Engineering Corporation chooses to replace the part, it will be at no cost to the customer and will be made available to the Distributor/Dealer from whom the customer purchased the product.
3. Replacement or repair parts, installed in the product, are warranted only for the remainder of warranty period of the product as though they were the original parts.
4. Allen Engineering Corporation's warranty applies only to the products that are manufactured by Allen Engineering and does not cover component parts such as engines and clutches. Allen Engineering Corporation DOES NOT warranty clutches. Engine warranty claims should be made directly to an authorized factory service center for the particular engine make.
5. Allen Engineering Corporation's warranty does not cover the normal maintenance of products or its components (such as engine tune-ups and oil changes). The warranty also does not cover normal wear and tear items (such as belts and consumables).
6. Allen Engineering Corporation's warranty will be void if it is determined that the defect resulted from operator abuse, failure to perform normal maintenance on the product, modification to product, alterations or repairs made to the product without the written approval of Allen Engineering Corporation. Allen Engineering Corporation specifically excludes from warranty any damage to any trowels resulting from an impact to the rotors. Allen Engineering Corporation also excludes from warranty any failure of clutches on any engine driven piece of equipment.
7. If a new gear box has a factory defect within the first year of use, Allen Engineering Corporation will either repair the gear box or replace it with a new gear box. If a new gearbox has a factory defect in the second year of use, Allen Engineering Corporation will either repair it or replace it with a factory reconditioned gear box. Impact damage is NOT covered under the gear box warranty.
8. Allen Engineering Corporation will pay shop labor repair on warranty at the Allen Engineering Shop Labor Rate in existence on the date of the warranty claim. An Allen Engineering Labor Chart will determine the time allowed to complete a repair and will govern the shop labor hours that will be allowed.
9. Allen Engineering Corporation will pay freight on warranty replacement parts at Worldwide standard ground rates. No warranty replacement parts will be shipped air freight at the expense of Allen Engineering Corporation. Allen Engineering only pays outbound freight charges when sending warranty replacement parts to the customer VIA ground service. Allen Engineering does not pay any inbound freight. However, if Allen Engineering determines this to be warranty defect only then will Allen Engineering reimburse the customer for inbound freight at standard ground rates.
10. Allen Engineering Corporation's warranty policy WILL NOT COVER the following: taxes, shop supplies, environmental surcharges, air freight, travel time, loss of rental revenue, or any other charges whatsoever or any liabilities for direct, incidental, or consequential damage or delay.
11. **Allen Engineering Corporation makes no other warranty, expressed or implied. This limited warranty is in lieu of the warranty of merchantability and fitness. There are no other warranties that extend beyond the description on this document.**
12. No Allen Engineering Corporation employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Allen Engineering Corporation.

SPECIFICATIONS ON 11 HP HONDA

LENGTH x WIDTH x HEIGHT	15 x 17.7 x 17.4 in.
DRY WEIGHT	68.4 lbs.
ENGINE TYPE	4 stroke, overhead valve, single cylinder
DISPLACEMENT	337 cc(20.6 cu in)
BORE x STROKE	82 x 64 mm (3.2 x 2.5 in)
MAX. OUTPUT	11.0 hp/3600 rpm
MAX. TORQUE	2.4 kg-m (17.36 ft-lb) / 2500 rpm
FUEL CONSUMPTION	313 g/kwh (.51 lb/hph)
COOLING SYSTEM	Forced air
IGNITION SYSTEM	Transistorized magneto
PTO SHAFT ROTATION	Counter-clockwise

SPECIFICATIONS ON 11 HP KAWASAKI

ENGINE TYPE	Forced air cooled 4-cycle horizontal shaft
BORE x STROKE	83 x 65 mm (3.27 x 2.56 in)
PISTON DISPLACEMENT	351 cc (21.4 cu in)
COMPRESSION RATIO	8.4:1
MAX. OUTPUT	11.1 hp / 3600 rpm
MAX. TORQUE	23.5 N-m (17.4 ft-lbs) / 2500 rpm
SHAFT ROTATION	Counter-clockwise
FAST IDLE SPEED	4000 rpm
SLOW IDLE SPEED	1300 rpm
FUEL TANK	6.4 L (6.8 US qt)
FUEL CONSUMPTION	322 g/kwh (240 g/hph)

POWER UNIT SPECIFICATIONS

GALLONS PER MINUTE	6 @ 2500 psi
QUICK DISCONNECT HOSES	50’ ft
EASILY REMOVABLE FRAME FOR MAINTENANCE	
COOLING SYSTEM	12 VOLT FAN (ENGAGES AT 110° F)
CONTROL SYSTEM	WEBSTER VALVE
TUBE LENGTHS	6 to 26 ft

1A OPERATIONS

OPERATING INSTRUCTIONS

To properly operate your Single Hydraulic Roller Tube Screed, you must follow the operating procedures below. These instructions *must* be followed or your machine could have severe problems in the years to come.

1. Make sure that there is no loose external hardware and check all hydraulic fittings.

2. Check all hydraulic hoses.

3. Check the quick disconnect fittings on the hoses and the machinery to insure that they are free from debris or foreign objects.

4. Connect hoses to the power unit and the motor end handle.

5. **<u>Always</u> make sure that the bypass valve (ILL. #9 on page 2A-2) is in the OFF position which is approximately 45° from horizontal. The on position *is* horizontal. <u>Severe damage could occur to the pump if the engine is started with the valve in the ON position.</u>**

6. Place the forward and reverse valve on the motor end handle in the neutral position.

7. Start the engine and allow it to run for 5 to 10 minutes to warm up the hydraulic fluid.

8. Push the handle on the power unit valve to the ON position.

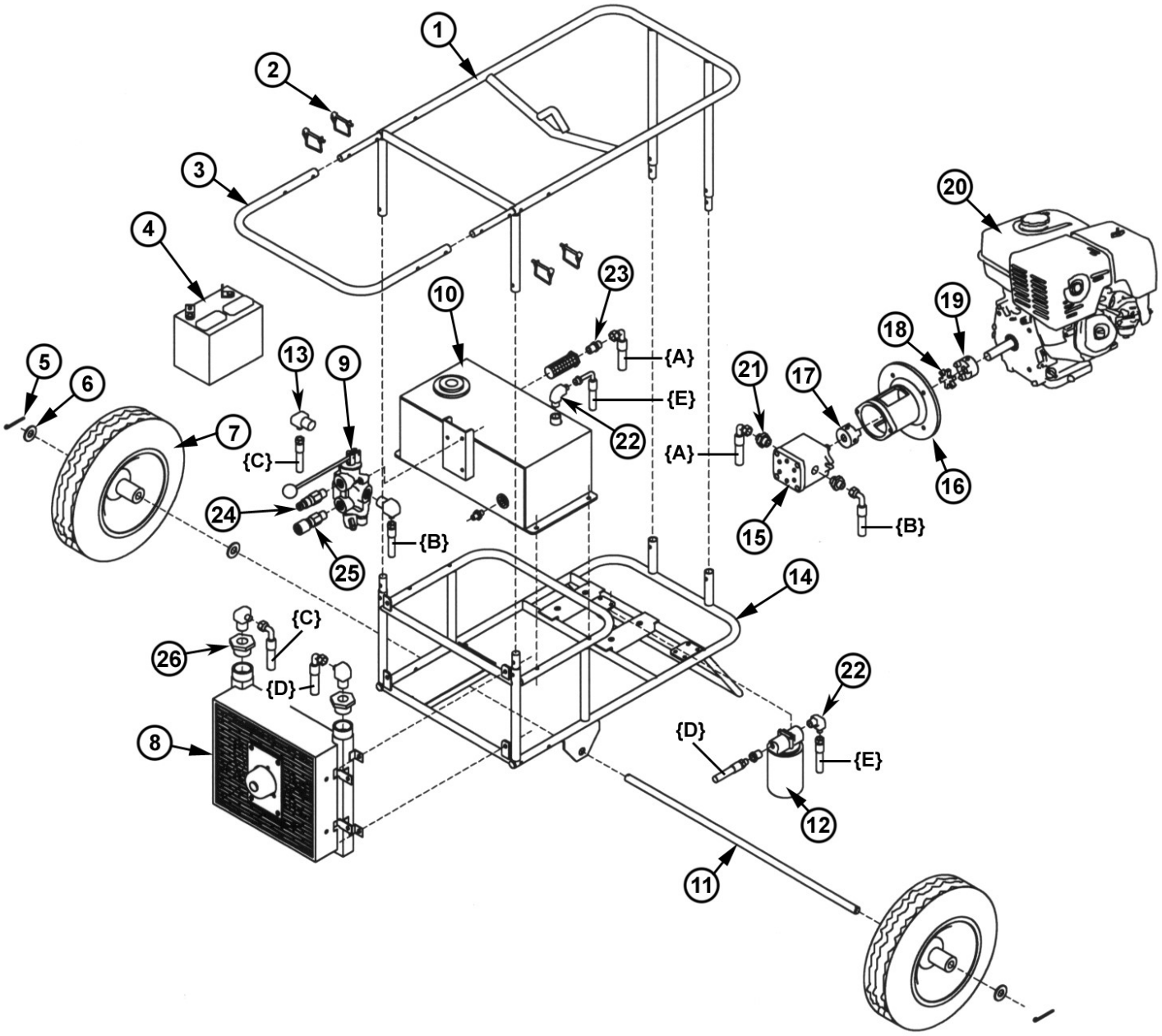
9. Move the valve handle on the motor end handle to the forward or reverse position.

10. The roller tube should be spinning at this time.

PARTS INFORMATION
TABLE OF CONTENTS

2A PARTS

Hydraulic Power Unit Assembly



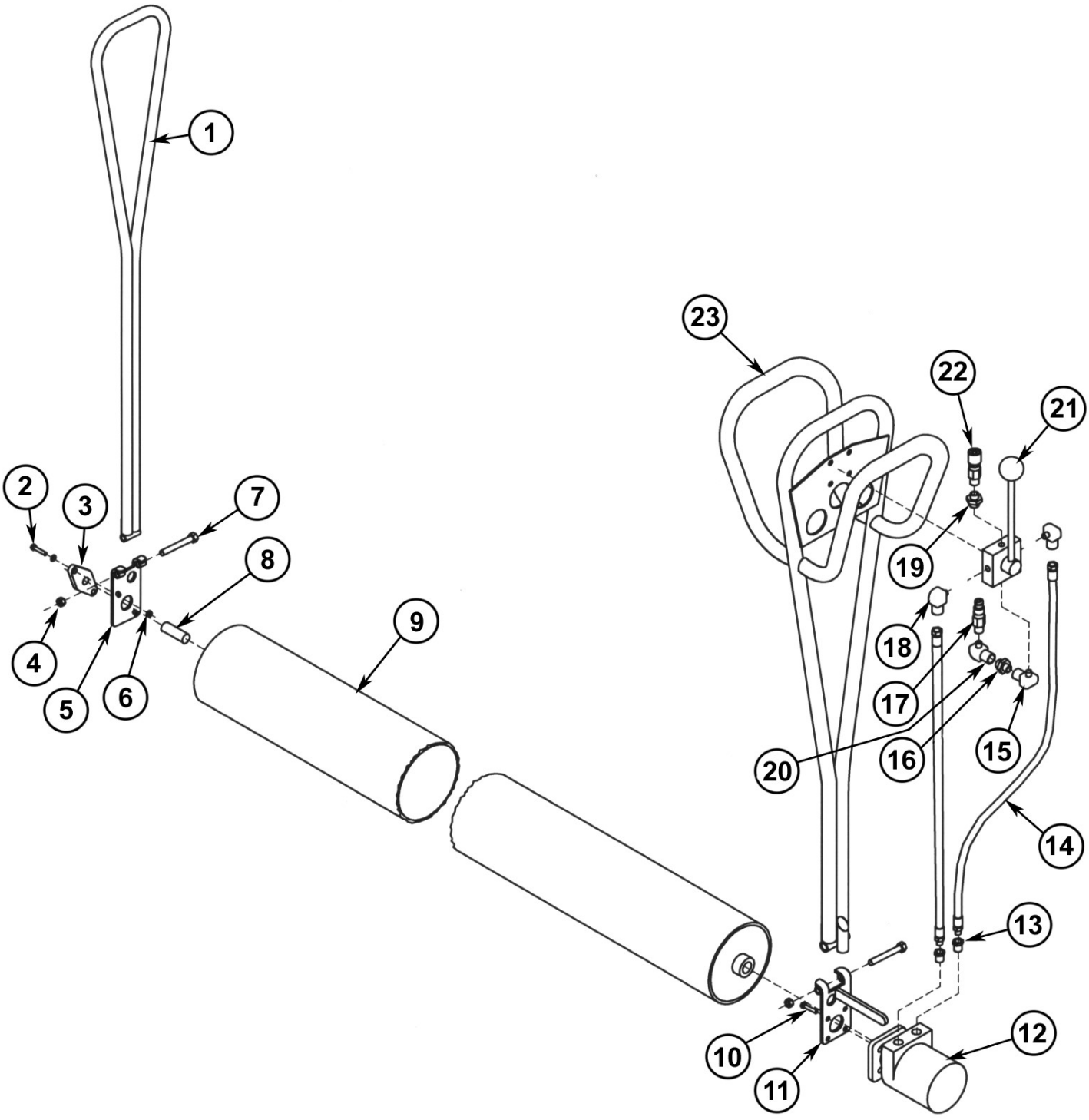
Hydraulic Power Unit Assembly (cont'd)

ILL.	PART #	DESCRIPTION	QTY.
1.	037457	TOP FRAME ASSEMBLY	1
2.	099039	PIN, SPRING LOADED	4
3.	037449	HANDLE	1
4.	019295	BATTERY, SMALL	1
5.	010133	PIN, COTTER	2
6.	010087	FLAT WASHER 3/4	4
7.	221058	TIRE AND WHEEL ASSEMBLY	2
8.	038293	COOLER, HYDRAULIC	1
9.	038294	VALVE, ON/OFF	1
10.	037475	TANK, HYDRAULIC	1
11.	038053	AXLE	1
12.	038295	FILTER	1
13.	038296	FTG. MALE 90° ELBOW	4
14.	037440	BOTTOM FRAME ASSEMBLY	1
15.	028953	PUMP, HYDRAULIC	1
16.	038303	BRACKET, PUMP MOUNTING	1
17.	010508	COUPLER, JAW 5/8	1
18.	010629	INSERT	1
19.	010509	COUPLER, JAW 1"	1
20.	061342	ENGINE, KOHLER CH440 14HP	1
21.	038297	FTG., STRAIGHT ADAPTOR	2
22.	038298	FTG., MALE 90° ELBOW	2
23.	019411	FTG., MALE CONNECTOR	1
24.	038301	FTG, FLUSH FACE MALE HALF QD F/ NPT	1
25.	038302	FTG, FLUSH FACE FEMALE HALF QD F/ NPT	1
26.	038299	FTG., PIPE BUSHING	2
27.	037562	HYDRAULIC POWER UNIT KIT	1

HOSE ASSEMBLIES

HOSE {A}	038304	HOSE, 1/2" x 18"	1
HOSE {B}	038305	HOSE, 3/8" x 17"	1
HOSE {C}	038306	HOSE, 3/8" x 15"	1
HOSE {D}	038307	HOSE, 3/8" x 18"	1
HOSE {E}	038308	HOSE, 3/8" x 28"	1

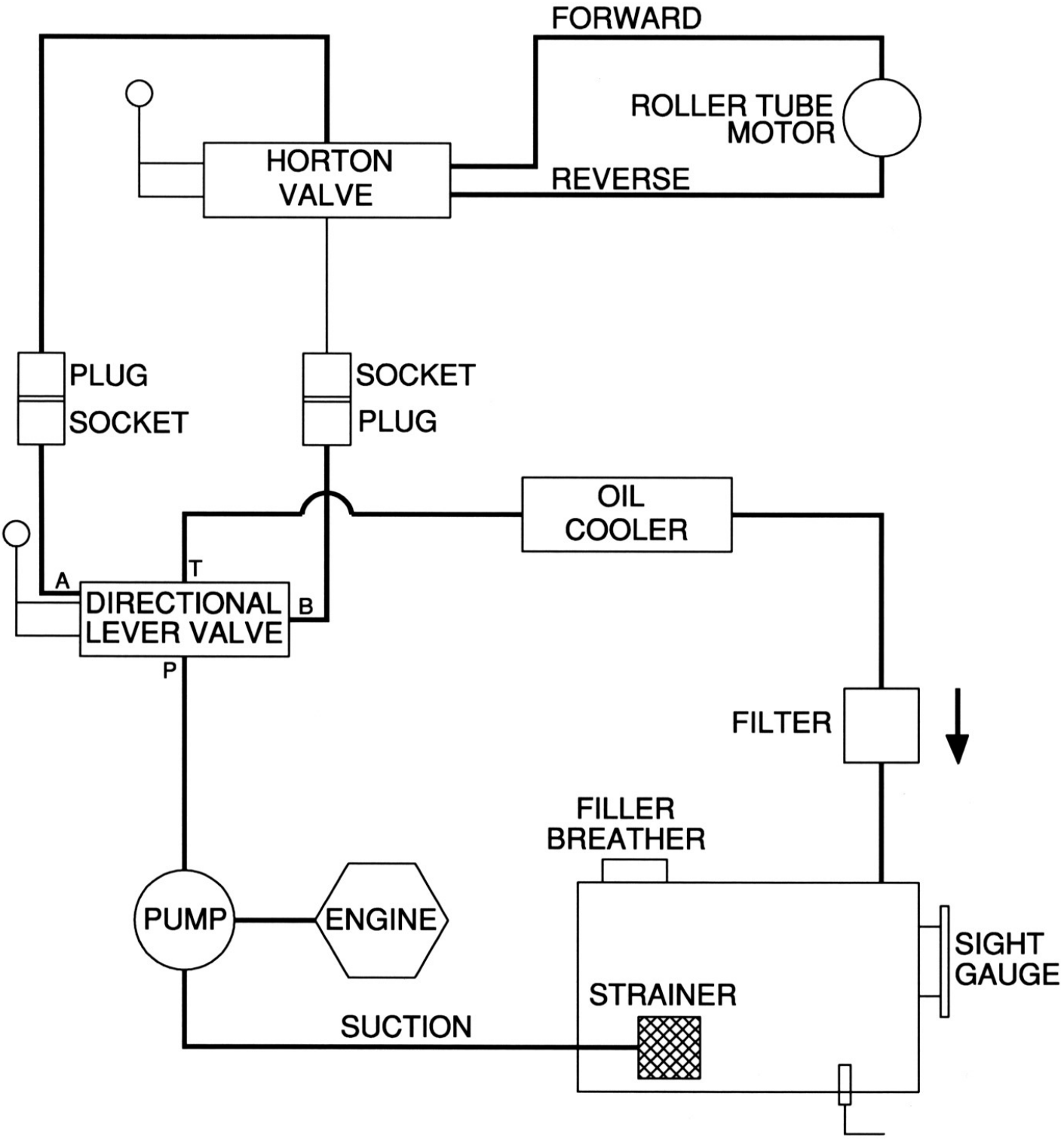
Handle Assembly



Handle Assembly (cont'd)

ILL.	PART #	DESCRIPTION	QTY.
1	028929	HANDLE, OPPOSITE END	1
2	010036	BOLT, 3/8	2
3	019334	BEARING	1
4	011238	NUT, 1/2-13	2
5	028936	BRACKET, OPPOSITE END HANDLE	1
6	010102	NUT, 3/8	2
7	023003	BOLT, 1/2	2
8	028955	PIN	1
9	099065	TUBE, 6" x 6'	1
	099066	TUBE, 6" x 6' w/ 1 VIBRATOR	1
	099080	TUBE, 6" x 8'	1
	099081	TUBE, 6" x 8' w/ 1 VIBRATOR	1
	099100	TUBE, 6" x 10'	1
	099101	TUBE, 6" x 10' w/ 1 VIBRATOR	1
	099120	TUBE, 6" x 12'	1
	099121	TUBE, 6" x 12' w/ 1 VIBRATOR	1
	099140	TUBE, 6" x 14'	1
	099141	TUBE, 6" x 14' w/ 1 VIBRATOR	1
	099160	TUBE, 6" x 16'	1
	099161	TUBE, 6" x 16' w/ 1 VIBRATOR	1
	099180	TUBE, 6" x 18'	1
	099181	TUBE, 6" x 18' w/ 1 VIBRATOR	1
	099182	TUBE, 6" x 18' w/ 2 VIBRATORS	1
	099200	TUBE, 6" x 20'	1
	099201	TUBE, 6" x 20' w/ 1 VIBRATOR	1
	099202	TUBE, 6" x 20' w/ 2 VIBRATORS	1
	099220	TUBE, 6" x 22'	1
	099221	TUBE, 6" x 22' w/ 1 VIBRATOR	1
	099222	TUBE, 6" x 22' w/ 2 VIBRATORS	1
	099240	TUBE, 6" x 24'	1
	099241	TUBE, 6" x 24' w/ 1 VIBRATOR	1
	099242	TUBE, 6" x 24' w/ 2 VIBRATORS	1
	099260	TUBE, 6" x 26'	1
	099261	TUBE, 6" x 26' w/ 1 VIBRATOR	1
	099262	TUBE, 6" x 26' w/ 2 VIBRATORS	1
10	010036	BOLT, 3/8	4
11	028932	BRACKET, MOTOR END HANDLE	1
12	028952	MOTOR, HYDRAULIC	1
13	019411	FTG, MP x MJIC (10)	2
14	028940	HOSE ASSEMBLY, 40"	2
15	038300	FTG, 3/8 x 1/2 SWIVEL 90°	1
16	019408	FTG, 1/2 x 1/2 FLARE CONNECTOR	1
17	038301	FTG, FLUSH FACE MALE HALF QD F/ NPT	1
18	013077	FTG, MALE 90° ELBOW	2
19	020773	FTG, MALE FTG.	1
20	013078	FTG, MALE 90° ELBOW	1
21	028987	VALVE, CONTROL	1
22	038302	FTG, FLUSH FACE FEMALE HALF QD F/ NPT	1
23	028913	HANDLE, MOTOR END	1
24	028927	HOSE, 50' ASSEMBLY (NOT SHOWN)	2

HYDRAULIC SCHEMATIC F/ POWER UNIT ASSEMBLY



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