

MAIN WEST MODELS

NSW 41 CLASS DIESEL KIT

GENERAL PROTOTYPE NOTES

The 10 locos in this class were built in Britain by Metropolitan Cammell Carriage and Wagon Co. Ltd., in collaboration with British Thompson Houston Co. Ltd., and were placed in service between October 1953 and February 1955. They were used almost exclusively in the Sydney Metropolitan area on shunting and transfer duties throughout their life. They did however, venture on to the Camden Branch on Narellan coal trains and Via Crucis Pilgrimage specials as well as Lithgow electrification work trains.

Trials were conducted in October 1955 and February 1957

Double heading trains to Thirroul and return which highlighted the problem of the second unit overheating. As a consequence, double heading of these locos was rare. The class proved to be very troublesome and there were many modifications made over the years in an endeavour to improve reliability. The major modifications which altered the external appearance of the locos were:-

(a) Extension of radiators and re-arrangement of airflow carried out in 1955-1956 in an attempt to improve cooling performance-

(b) Relocation of mufflers onto roof of hood section, covered by separate enclosure. This modification was only applied to 4102 and 4104 and carried out in 1958.

Around 1966 when contemplating the future to this class it was decided to purchase sufficient additional 48 class locos to replace the 41's which were then allowed to continue in service with normal maintenance and minor modifications necessary to allow useful service for a few more years. Major overhauls ceased in 1972 and each loco was set aside as it suffered a major fault. 4102 was the last in service, being set aside in June 1975. Early withdrawals were 4106 (January 1958) and 4105 (April 1961) following severe fires. All units have now been scrapped except 4102, which has been restored to operating condition at the Rail Transport Museum at Thirlmere.

The locos were originally painted green with yellow stripe along side hoods and around cab. During 1968-1970 they were repainted in the then standard diesel tuscan red livery, similar yellow striping and it appears that panelling around sides and top of front radiator grille was also painted yellow.

The following tabulation gives the dates of significant events during the life of the 41 class:-

LOCO	DATE IN SERVICE FITTED	LARGER RADIATORS	MUFFLERS RELOCATED ON ROOF	DATE REPAINTED	DATE STOPPED
4101	12/53	1955/6	-	7/68	6/73
4102	10/53	"	1958	?	6/75
4103	1/54	"	-	?	4/74
4104	1/54	"	1958	8/68	10/73
4105	2/54	"	-	-	4/61
4106	2/54	"	-	-	1/58
4107	1/54	"	-	2/69	8/73
4108	2/54	"	-	?	12/67
4109	3/54	"	-	10/68	2/72
4110	2/55	"	-	9/70	5/74

MAIN WEST MODELS

Assembly Instructions: NSW 41 Class Kit

Original Patterns by Workshop 5 Models

Mechanism Required: 2 Tenshodo "Spud" 31.5 by 11.67mm Disc Wheels

Note: Read assembly instructions thoroughly before starting to assemble the kit. Recommend Super Glue for tacking pieces together. Joints should then be reinforced with 5 minute Araldite or similar. Refer to separate sheet for prototype details, modelling references and painting tips.

1. Clean all castings to remove mould release residue. Warped castings can be straightened by heating in oven at 150 degrees F and holding to shape while cooling
2. Remove flash from castings with fine files or sharp craft knife. NOTE CAREFULLY exercise extreme care with cab sides and fronts, radiator castings and buffer beam assembly to avoid breaking fine detail on these items. Suggest don't remove flash from cab windows until body and roof; assembled which will provide a bit of strength around cab area. Fill any casting holes with body putty or similar.
3. Refer Diagram 1 and drill all necessary holes in castings. Assemble parts in following order, check fit of parts before applying adhesive.
 - a) Fit each side to "Spud" mechanism chassis casting using small wood screws.
 - b) Stand assembly on flat surface and glue both hoods in position, also radiators.
 - c) Glue cab fronts and roof in place, some filling of joints around cab may be required. Slightly radius edge of cab roof.
 - d) Glue buffer beams in place.
 - e) Strengthen all major joints with Araldite etc and set aside to dry.
4. Fit headlamps, marker lights, horns, buffers and door latches.
5. Make up handrails as per diagram 2 and glue into position.
6. The following steps relate to fitting "Spud" units to chassis casting. Refer to diagram 3 for enlargement of these procedures.
 - a) From plastic bag of hardware, select the black yoke shaped as in diagram, refer to separate notes headed "YOKE REPLACEMENT" and fit to spud units.
 - b) Fit "Spud" units to chassis and attach sideframes.
 - c) Screw complete assembly into body shell using small wood screws.
7. Fit fuel tank to chassis using larger wood screw.
8. PAINTING: Refer separate sheet. The model is designed to accept Kadee no.16 couplers

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THE MODEL

The major run of this model represents the "extended radiator" version, which applied subsequent to 1955/1956. Limited runs of the original "short radiator" and modified hood 4102/4104 versions are planned for the future.

The kits are complete, including decals for cab side and buffer beam numbers and striping, the only items to be acquired to complete an operating model are 2 Tenshodo "spud" units, 31.5 x 11.75mm with disc wheels.

PAINTING

Bogies, fuel tank, & buffers	Black
Buffer beams	Red (white numbers)
Handrails	A bit uncertain, they look nicest black
The Rest	Green or Tuscan Red

Craftsman Models produce a good spraying enamel for Tuscan or 40 class Green, which are recommended.

MODELLING REFERENCES

A.M.R.M. May/June 1975 (Plan and photos),
AHRM "GENERATION ONE" (photos),
RTM "ROUNDHOUSE" January 1984, Vol XXI, No.1 (Article and photos).

YOKE REPLACEMENT

CAUTION: To replace the yoke in the SPUD, some care will need to be exercised to avoid damaging the Gear housing and electrical pickups. To remove the bottom cover, locate the lock tabs molded onto the side of the bottom cover, two at each end just outside the wheels. Then locate the end of the bottom cover, which has a small tab that fits over a stud on the main gearcase moldings (This tab is used to provide longitudinal location for the bottom cover and care must be taken not to damage it during removal replacement of the cover). Carefully insert a small screwdriver behind each tab in turn, starting at the tab end of the bottom cover, and remove the cover. The wheelsets are now free to fall out, so take care to avoid this. Install the new yoke in the bottom cover, securing with a small drop of cement. When replacing the bottom cover, BE SURE that the spring wipers are in place behind each wheel. If the cover is pressed on while these wipers are out of place, damage to the wipers can occur which will seriously affect performance. To re-install the cover, orient the longitudinal locating tab correctly and press the cover gently in place, making sure all the tabs are seated.

DIAGRAM 1

DRILL TABLE		
IMPERIAL	METRIC	NO.
.025 (p21)	0.6	75
.035	0.9	65
.050 3/64"	1.2	56
.060 1/16"	1.5	53
.078 5/64"	2.0	47

Fitting of Spud Mounting bracket and Fuel Tank into Body Shell

Drilling Details

1. Drill out 9/64"
2. Countersink to accept head of Woodscrew

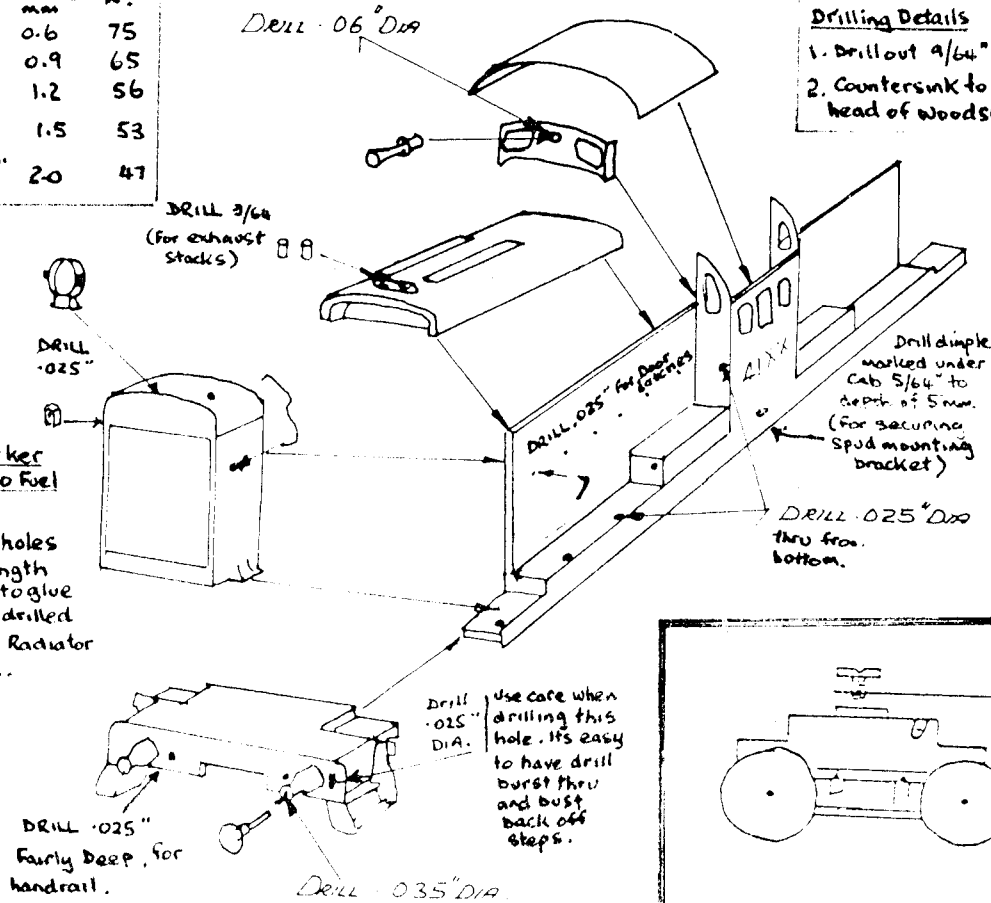
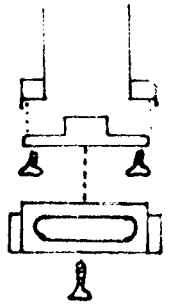


DIAGRAM 3

YOKE SHAPE

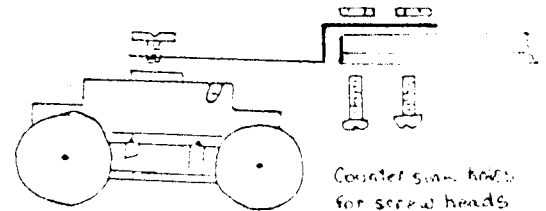
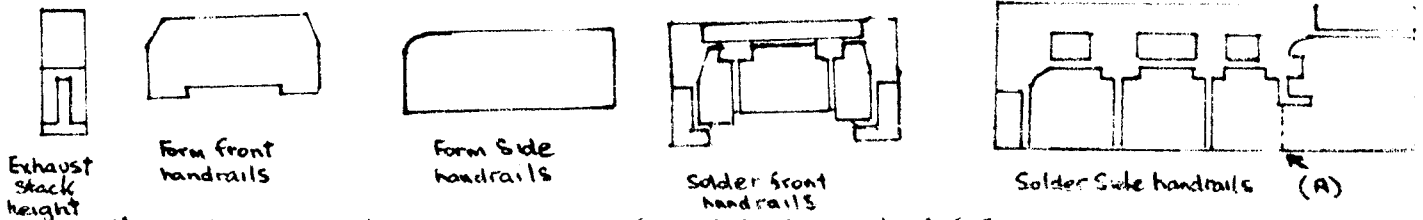


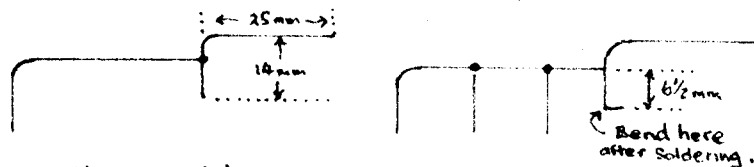
DIAGRAM 2

Kit contains 5 jigs for forming and soldering handrails and exhaust stacks :-

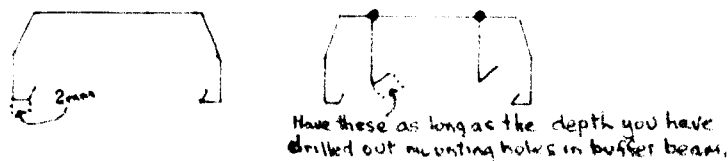


- NOTES. 1. Suggest mount all on scrap piece of wood, let bottom half of front handrail + Exhaust stack height jigs sit over edge. Forming jigs dont need to sit over edge.
2. Remove any casting dags, particularly check exhaust jig.
3. Saw or file channel in Side handrail soldering jig at point (A) above. Error in original design.

Side Handrails (4) Form and solder in sequence as under, from .020" wire.

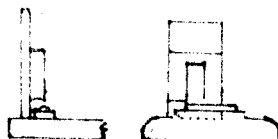


Front Handrails (2)



Exhaust Stacks

Make from 3/64" rod, use jig to set height while glueing into position. File top of each stack flat after cutting + before glueing up.



SOME (HOPEFULLY) HELPFUL SUGGESTIONS

1. Fit hood door latches prior to assembling body shell.
2. Fit head lights, marker lights + horns last thing before painting to avoid damage to these items. Test fit before assembly, however, especially horns.
3. Cut flash off horns with sharp knife, very carefully before cutting off casting sprue.
4. File machining dags off wood screws before use. Tap the relevant holes by carefully working screws back and forth.